

Presentation to the  
Advisory Council on Drinking Water Quality  
and Testing Standards

Elora, ON  
October 28, 2004

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## Introduction

- This study is the result of an independent, unfunded effort to assess the economic impact of Ontario Drinking Water Systems Regulation 170/03.
- In the process, the study also collected data on behaviours toward water quality, including how rural tourism service providers test their water, how often they test, the results of those tests and what treatment systems are in place.
- Quantify the anecdotal evidence

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## Methodology

- Questionnaires completed online at [www.wellsafe.net](http://www.wellsafe.net)
- Data collected by Acrobat Research Ltd.
- Survey notification communicated through tourism marketing organizations including:
  - FOBBA (B&B Assn), OPCA (Campgrounds), OFCA (Country Accommodations), NOTO (Nature & Outdoor Tourism in Ontario), Canadian Bed and Breakfast Guide member list, Ontario Accommodation Association, plus approximately 90 local Chamber of Commerce offices based on the Ontario Chamber of Commerce's member list.

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## Methodology

- Identification & validation of respondents:
  - Registration & password login required
  - Built-in qualification procedure; failure resulted in termination
- 433 completion attempts were made
- 259 valid questionnaires were completed

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## Who responded?

- The informed:
  - This issue is still well below the radar of most small water system owners
  - Only 37% of respondents reported they received written notification of the regulation from the MOE

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## Profile: Who Responded

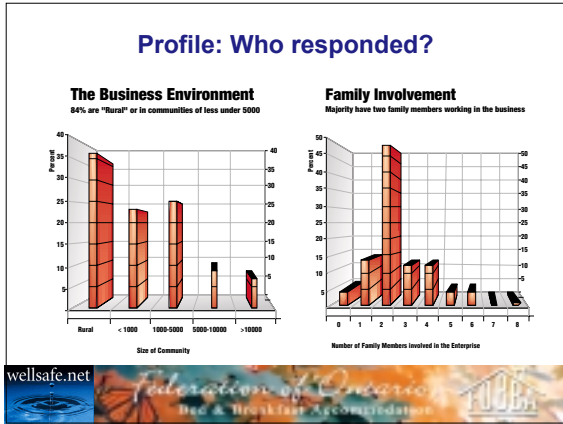
- Tourism businesses that are:

• Small	<u>Median Income: \$69,000</u>
• Privately owned	<u>99%</u>
• Family operated	<u>96%</u>
• Rural	<u>84%</u>

  - 70% = Only Business / 18% = Primary Business
  - More than 8 in 10 live in communities < 5000

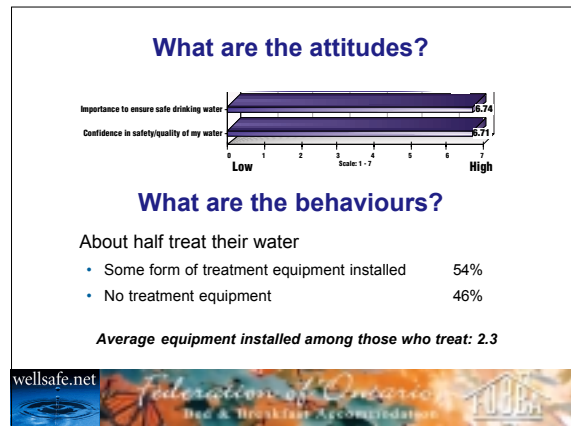
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- ### Profile: Who responded?
- Accommodations Sector: 83%
  - Majority are small establishments:
    - 29% fewer than 4 rooms / sites
    - 78% fewer than 21 rooms
    - Median number of rooms / accn sites = 8
    - 22% of respondents represent 74% of all rooms
- How do they think of their water supply?*

- ### Profile: Who responded?
- We live where we work 88%
    - B&Bs 99%
    - Small Inns 100%
    - Resort/Motel/Hotel 89%
    - Camp/Trailer Park 85%
    - Cottage/Housekpg 68%
  - We regularly drink our own water 94%



- ### What are the behaviours?
- Whether or not we have treatment systems installed has no bearing on whether we drink our water*
- 94% of those with treatment drink their water
  - 93% of those with no treatment drink their water
  - 96% are "Very Confident" in the safety and quality of their water supply

- ### Confidence translates to behaviour
- Where's the problem?
    - We drink our water regardless of where it comes from.*
    - But what about treatment?*
  - Surface system 84% drink 76% have treatment
  - Drilled well 96% drink 44% have treatment
  - Dug well 100% drink 57% have treatment
- What does it mean?*

### Is this confidence reasonable?

Has anyone ever become ill from drinking your water? **NO: 100%**

Are you aware of any situation where someone else has become ill as a result of drinking from a PRIVATE water source? **NO: 100%**

Have you ever received a less than acceptable test score? **NO: 86%**

Was the situation corrected after taking action? **YES 100%**

*Does treatment influence test scores?*



### Is this confidence reasonable?

- Does treatment result in a lower incidence of unacceptable test results?

*Of those who have NEVER had a negative rating:*

- 53% have treatment
- 47% do not

*Of those who HAVE received a negative rating:*

- 68% have treatment
- 32% do not

*What's going on here?*



### What are the indicators?

- If not the presence of treatment, is it source?

*Negative tests by source:*

- Surface system: 19% have had negatives
- Drilled well: 9% have had negatives
- Dug well: 23% have had negatives

*Drilled wells are turning up fewer negatives and have the lowest incidence of treatment equipment installed.*

*Confidence people have in their untreated drilled wells seems justified.*



### Are we acting responsibly?

*Percentage who test: 94%*

*Cumulative*

Daily	7%	7%
Weekly	11%	18%
Bi-weekly	6%	23%
Monthly	25%	49%
Quarterly	15%	63%
2 or 3x per yr	18%	81%
Once per yr	11%	92%
Other	2%	94%
Do not test	7%	100%



### Are we acting responsibly?

*Who tests? What's reasonable?*

Frequency	B&Bs	Inn/Res/M/H	Camps	Cottages
Daily / wkly / biwkly	7%	27%	61%	11%
Monthly	30%	29%	18%	5%
Quarterly	27%	12%	3%	0%
2 or 3x per yr	20%	10%	9%	37%
Annually	11%	12%	3%	26%
Other	1%	1%	6%	5%
Do not test	4%	9%	0%	16%
Negative test ever?	10%	8%	19%	27%

*73% of B&Bs have drilled wells. Testing behaviour appears consistent with confidence in supply and outcomes of tests.*



### Are we satisfied?

*Tested by:*

Health 69%

Private Lab 18%

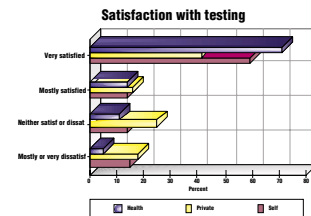
Self Test 10%

*Very or Mostly Satisfied:*

Health 85%

Private Lab 57%

Self Test 73%



## What's it going to cost?

### Capital Cost of Compliance\*

	Low Est	High Est	What they could pay**
Mean	\$13,935	\$29,045	\$3,940
Median	\$10,000	\$18,500	\$1,670

### Annual Cost of Testing & Maintenance\*

	Low Est	High Est	What they could pay**
Mean	\$1,950	\$5,475	\$477
Median	\$1,300	\$2,360	\$200

\* Responses are only from those who have obtained an engineer's report or qualified estimate (25% of sample)

\*\* Excludes those who said they could pay nothing

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## What are people going to do?

### Intentions

- Give notice to comply 22%
- Seek an exemption 29%
- Close and cease operations 16%
- Operate without complying 13%
- Not yet decided/wait and see 12%
- Already in compliance 5%
- Other 5%

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## What are people going to do?

### Who intends?

Intention	B&Bs	Inn/Res/M/H	Camps	Cottages
Exemption	32%	32%	15%	47%
Comply	4%	30%	33%	32%
Close	37%	5%	3%	5%
Ignore	11%	17%	6%	5%
Wait and see	10%	10%	18%	11%
Other	4%	4%	6%	0%
Complete	1%	1%	18%	0%
Only business	55%	84%	84%	53%
Primary	20%	16%	13%	37%
Secondary	25%	0%	3%	11%

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## Tourism Revenue

- Actual \$ amount lost if forced to close:  
Mean: \$240,000  
Median: \$69,000
- Total revenues represented by 217 survey respondents:  
\$52.1 Million (17% refused)
- Total accommodation-nights represented by survey respondents:  
313,765
- Total P/T and F/T employees before counting family members:  
1,415
- Tourism GDP represented by rural Ontario accommodations:  
\$3.3 Billion (MTR)

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## Impact

### Projected:

Based only on those who say they intend to close, the direct cost to the rural tourism economy will be approximately:

**\$528 Million per year**  
(Excludes secondary spending from events, retail, restaurants)

Projected job losses: 12,000 +  
Family members affected: 5,500 +  
Volunteers affected: 3,000 +

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## Impact

### Competitiveness

The threat of reduced room inventory gives an unfair commercial advantage to municipally supplied tourism service providers in small communities.

Reduces competition and increases their business at the expense of those forced to close.

Removing room inventory from a community reduces overnight visitor capacity and threatens related retail and secondary spending.

The cost of implementation and testing will be a non-recoverable expense by small income properties.

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## Conclusions

*Where is the problem with private drinking water systems, and how is this regulation designed to address it?*

- The presence of treatment equipment does not influence whether we drink our own water.
- The presence of treatment equipment bears no relationship to the quality of test results.
- Test results have little relationship as to source.
- Where water comes from does not influence whether or not we drink it.
- We have high confidence in our water supply which is supported by test results.
- We test, take precautions, and corrective action as needed.

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## Recommendations

- Return testing responsibility and jurisdiction to Department of Health units
- Eliminate the engineering requirement in favour of a local inspection authority referring to building code-style specifications
- Bed and Breakfasts are private residences where owners live year-round. B&Bs that provide meals for fewer than 10 guests should be designated as a unique category and exempt under the regulation.
- Resolve conflicting exemptions under the HPPA regarding rooming houses and Bed and Breakfasts; furthermore, eliminate the contradiction that currently exempts B&Bs serving continental breakfasts vs full breakfasts that are "ready to eat".
- The Government has stated clearly and consistently that it intends to implement every recommendation of the O'Connor Report. This must include financial assistance for small water system owners.

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## Recommendations

- For all small tourism operators, consider the question of whether an establishment has employees as a determinant of exemption under the regulation
- For non-chlorinated systems with no history of adverse tests, reduce mandatory testing frequency to a quarterly basis.
- Under the proposed regime of weekly testing, a single adverse result in two years is unreasonable to warrant a return to two more years of mandatory weekly testing. Errors and cross-contamination can occur that are not the result of the water source itself. If an adverse test cannot be verified to have been caused by the water source, this requirement should be relaxed.
- Relief from testing based on a history of clean tests should be automatic rather than subject to an application and approval procedure.

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## For the Record

*The following comes from the official website of the Ontario Society of Professional Engineers, specifically with regard to the Safe Drinking Water Act, 2002. (This page at <http://www.ospe.on.ca/safewaternew/nhtml> has now been removed.)*

*Excerpts:*

...

### What is the issue?

• In December of 2002, the government passed the Safe Drinking Water Act, 2002 as well as the Sustainable Water and Sewage Systems Act, 2002...

• ...The Society, through its Safe Water Task Force chaired by Bob Goodings, P.Eng, **participated in the legislative process** when water and wastewater legislation was being debated and regulations considered.

### Why is it important?

• By applying principals [sic] that **promote**

• **1) the role of the professional engineer**, and

• **2) the need for sustainable funding for water supply systems.**

• **The Society was able to help the government protect the public while at the same time generate more opportunities for Ontario's engineers.**

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## For the Record

### The Society's Position

• In late 2001, the Society's Board of Directors voted to create a Safe Water Task Force to review the Walkerton inquiry report and to develop other policy positions as required relating to the production and distribution of safe drinking water in Ontario.

• The Task Force **developed principles with respect to water and wastewater systems** that they applied during their evaluation of the Safe Drinking Water Act, 2002 and the Sustainable Water and Sewage Systems Act, 2002. **These principals were based on supporting and expanding the role of the engineer in the design, maintenance and oversight of Ontario's water systems.**

With these principals in mind, the Society took the following position:

• Wherever possible and practical, the Ontario Society of Professional Engineers **should advocate increasing the involvement of licenced professional engineers in the design, operation and ongoing oversight of water and wastewater systems.** This could take many forms, including such examples as the following:

• All water system operating agencies serving the public **should be required to name a "Licenced Professional Engineer of Record"**, operating as a senior employee of the agency or in an external consulting role.

• The Engineer of Record should be required, as a condition of the water and wastewater systems license, to **oversee all aspects of the operational planning process, including writing, updating and sealing the system's operating plan...**

• The Ontario government **should legislate and rigorously enforce quality standards for water systems to ensure that communities have safe drinking water.** However, we believe that determinations about levels of service in individual communities should be left to local rate payers ... We believe that by allowing levels of service to mirror local needs, the government will promote innovation in systems design **and ensure the continuing involvement of professional engineers familiar with each unique system.**

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## For the Record

- Small water systems need to be treated differently than municipal systems or even large non-municipal systems
- There are 5 "strategic directions" that comprise the new Ontario Tourism Strategy:
  - "Developing an "All of Government" approach
- The potential loss to the \$3.3B in rural tourism revenue must be assessed
  - A lot of money is being spent on evaluating and re-writing this legislation. Most of the opposing positions have been developed and presented with no funding whatsoever. We need to invest in obtaining good information about economic impact and ensure that the regulation addresses a real problem. We don't even know where and whether a small water systems problem exists.

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## Summary

- The Ontario Society of Professional Engineers was instrumental in driving their involvement in this initiative.
- We need to give the same power and attention to the issues raised by rural tourism service providers before this Council, because they are already committed to the quality of the water they drink, in the premises where they live.

They do not need a regulatory regime of enforcement to compel them to do things they already know are right.



Our written submission includes open ended verbatim comments from survey respondents, and a list of the communities that participated.

I urge Council members to read these, and consider them along with the statistical data in your recommendations to the Minister.



## Predictions

You heard it here first

