"Love the tank you're with" Huron-Kinloss Community Septic Inspections

HALIBURTON SEPTIC SYSTEMS INSPECTION

PRESENTATION

APRIL 12, 2013





Stewardship Council

Background



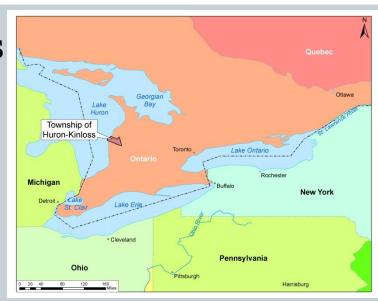






The Township of Huron-Kinloss

- The Township of Huron-Kinloss is located on the southeastern shore of Lake Huron.
- Located in Bruce County, Huron-Kinloss has 18 km of Lake Huron shoreline.



- Permanent population of approximately 6,500, with closer to 10,000 residents during the summer months.
- Two inland urban communities Lucknow and Ripley serviced by municipal sewers.

The Township of Huron-Kinloss



- The shoreline areas developed with seasonal and permanent dwellings.
- Increasingly more seasonal residences converting to yearround properties.
- The inland areas are primarily agricultural lands, less densely developed than the shoreline.
- Approximately 2,900, private septic systems in the Township.





Water Quality Issues

5

Issues surrounding:

- Beach closures
- Nuisance algal blooms
- High levels of phosphorus and nitrogen in local waterways









Water Quality Issues

- The water quality issues exacerbated tensions between permanent and seasonal residents over environmental impacts.
- Finger-pointing, despite 10 years of water quality data showing both septic systems and agriculture as likely contributors.
- Residents demanded action from the Township Council

Addressing the Issues

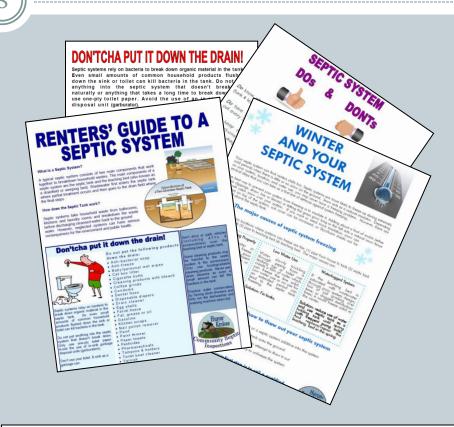
- Needed a program that would include an integrated approach to link human behaviour to the environment.
- A municipal-wide septic inspection program, the Huron-Kinloss Community Septic Inspections (HKCSI), was developed.

Community Septic Inspections

 This mandatory program was developed using the strategies of Community-Based Social Marketing (CBSM)

What We Do







nspection Date: 5/4/2009 Inspector: d.bel

HKCSI



- Program initiated in spring of 2007.
- On an 8 year cycle, all septic systems in the Township will be inspected.
- Non-invasive, visual inspection.
- Pump-outs are required (must be pumped out within 12 months prior to the inspection).
- Following the inspection, the property owner receives an inspection package containing: inspection report, aerial map showing the septic system and education material.

Database





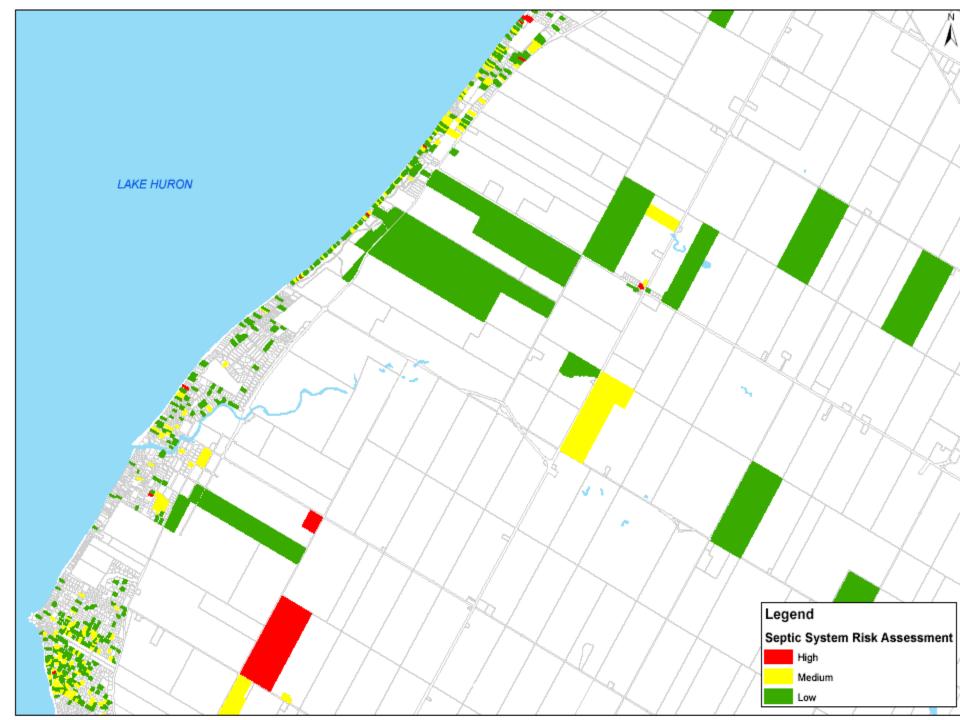
SEPTIC INSPECTION REPORT

Municipa Local Legal Descript Water Sou dditional Water Sou 5/2011 Risk Assessm Repairs M	ation:ption:			
Legal Descript Water Sou dditional Water Sour	ption: purce: urces:			
Water Sou dditional Water Sou 5/2011 Risk Assessm	purce:			
dditional Water Sou	urces:			
5/2011 Risk Assessm				T
	ment:			
Repairs M				
	Made:			
	- 1	ļ		
Current Risk Assessm	m ent:		1	
T	laca	octor:	n.S.	
	шэр	ector.		
	Lurrent Risk Assessi		Inspector:	

GIS Mapping









Huron-Kinloss

Community Septic Inspections Huron - Kinloss



Use this folder to keep all of your septic system records, including maintenance and inspection reports.

If you sell your property, please provide this folder to the new owners.

A BRIEF INTRODUCTION TO YOUR SEPTIC SYSTEM

Many rural homes and cottages use an on-site septic system to treat household wastewater. Septic systems are the responsibility of the homeowner. It is up to you to keep your system working properly to protect the environment, public health and your investment. "Out-of-sight" should not mean "out-of-mind". A septic system, like any other piece of equipment in your home or cottage, must be maintained. Failled systems can be very costly to repair or replace, so a little septic care will go a long way!



When properly designed, constructed and maintained, a septic system can provide long-term, effective treatment of household wastewater. If you take good care of your system, you will save yourself time, money and worries. A poorly functioning septic system can be hazardous to the environment, public health and your pocketbook.

For proper treatment of wastewater, it is very important that the septic system fits the size requirement for the house it is attached to. Proper sizing and maintenance of your septic system can have a significant impact on how long and how well your system performs.

This folder contains information on maintaining your septic system, and general tips for its operation.



Huron-Kinloss





Septic Maintenance Record

Date	Description	Company and Phone Number	Comments

The HK-CSI is a joint project between the Township of Huron-Kinloss, the Grey-Bruce Health Unit and B.M. Ross and Associates Limited.





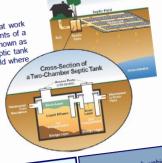


RENTERS' GUIDE TO A SEPTIC SYSTEM

A typical septic system consists of two main components that work A typical sepure system consists of two main components that work together to breakdown household wastes. The main components of a regenter to preakdown nousehold wastes. The main components of a septic system are the septic tank and the leaching bed (also known as sepuc system are the sepuc tank and the learning the tarso known as a drainfield or weeping bed). Wastewater first enters the septic tank a drainned or weeping bed), wastewater first enters the septic tank where partial treatment occurs and then goes to the drain field where the final steps

How does the Septic Tank work?

Septic systems take household waste from bathrooms, kitchens and laundry rooms and breakdown the waste before discharging cleansed water back to the ground water. However, neglected systems can have serious consequences for the environment and public health.



Don'tcha put it down the drain! Do not put the following products



break down organic material in the

septic tank. So even small

toilet can kill bacteria in the tank.

disposal units (garburators).

garbage can.

amounts of common household

Avoid the use of in-sink garbage

Don't use your toilet & sink as a

down the drain:

- Anti-bacterial soap
- Baby/personal wet wipes · Cat box litter
- · Cigarette butts
- · Cleaning products with bleach
- · Coffee grinds · Condoms Dental floss
- Disposable diapers
- · Drain cleaner
- Egg shells Facial tissue
- · Fat, grease or oil products flushed down the sink or
 - Gasoline Kitchen scraps Nail polish remover
 - · Paint
- Do not put anything into the septic · Paint thinner system that doesn't break down. Only use one-ply toilet paper.
 - · Paper towels Pesticides
 - Pharmaceuticals
 - Tampons & holders · Toilet bowl cleaner

ommunit Inspec

Don't drive or park vehicle (including ATVs snowmobiles) over the leaching bed or septic tank.

Some cleaning products may be harmful to the septi system & the environment.
Only use biodegradable cleaning products. Never use drain cleaners as even a small amount can kill the bacteria in the tank

Practice water conservation by having short showers at only run the dishwasher a washing machine when fu



PHOSPHATE FREE HOUSEHOLD PRODUCTS

Many common household products contain phosphates. When excess phosphate enters Many common household products contain phosphates. When excess phosphate enters a waterway, it can cause algae blooms. Algae blooms can cause a decrease in oxygen and other causes are caused and other causes are caused and other causes and other caused a waterway, it can cause algae blooms. Algae blooms can cause a decrease in oxygen levels, impacting fish and other aquatic species. After the algae dies, the decomposing



- All-Purpose Cleaner Dish Soap
- Car Wash Soap
- Shampoo & Conditioner
- Glass Cleaner
- Stain Remover
- Toilet Bowl Cleaner Fertilizer



Varnish

Program Demonstration Days

15

TOWNSHIP OF HURON-KINLOSS

COMMUNITY SEPTIC
INSPECTION PROGRAM

PUBLIC DEMONSTRATION

WELCOME



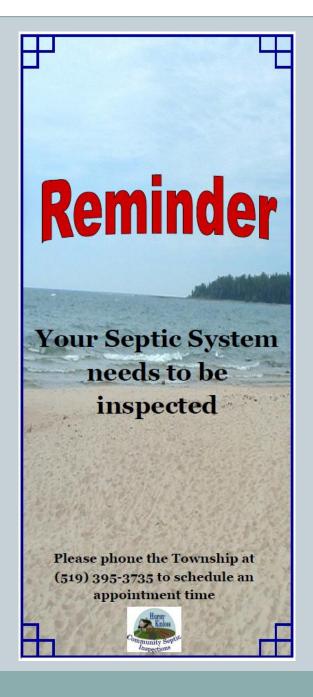












The Huron-Kinloss Community Septic Inspection (HK-CSI) missed you last year!

In order to keep Lake Huron's beaches and water clean for future generations everyone must become environmentally conscious. Lake Huron's ecosystem is fragile especially due to increasing human settlement in the Great Lakes Basin.

Lake levels have drastically fluctuated, invasive species like zebra mussels are littered on beaches, algae exists in unprecedented amounts, scum appears along the shoreline and water quality warnings occur on a regular basis.

However, there is something YOU can do to help reduce environmental changes along the Lake Huron shoreline.

A SEPTIC SYSTEM INSPECTION

can keep the coasts clear

Septic systems that are not properly maintained are a threat to your health and the environment though contamination of soil and groundwater.

Be proactive and have your septic system inspected to reduce repair costs in the future!

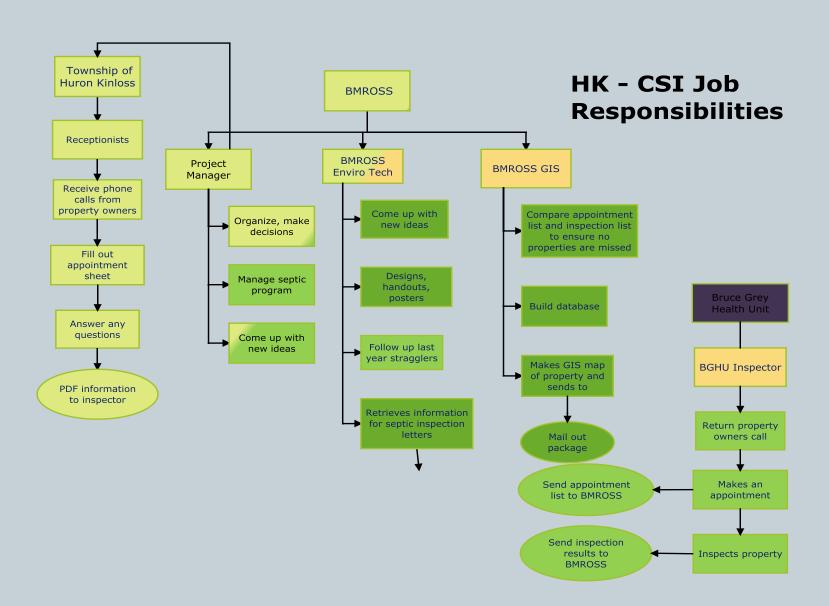
MOST SEPTIC SYSTEMS DO NOT NEED TO BE REPLACED.
MINOR REPAIRS OR SITE CHANGES CAN LEAD TO A
BETTER OPERATING SYSTEM.



PLEASE CALL the Township office at (519) 395-3735, for your Huron-Kinloss Community Septic Inspection (HK-CSI).

Additional Information
Huron- Kinloss:
Website: www.huronkinloss.com

Grey-Bruce Public Health Unit:
Phone: 1-800-263-3456
Website: www.publichealthgreybruce.on.ca



Community Based Social Marketing



Norms Attitudes: Ustainable Commitments

Prompts Community Benefits

Motivation Social

Tools

Motivation Behaviour

Community-Based Social Marketing



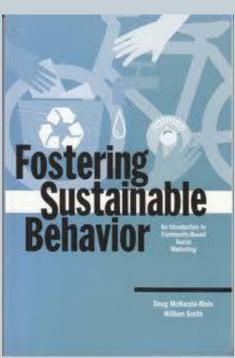
- The purpose of using social marketing as a methodology is to engage the citizens of Huron-Kinloss in the continual progress of the septic inspection program by developing a change in culture.
- Through CBSM, the desire is to have a community dedicated to participation in, and continuation of, the project as part of community-wide environmental concern and stewardship.

Community-Based Social Marketing

20

 CBSM is a method of applying marketing techniques to influence and change attitudes, behaviours and norms.

- 5 steps in CBSM:
 - Identify behaviour to change
 - Identifying barriers and benefits
 - Develop a strategy
 - Pilot the strategy
 - Implement and evaluate



The Strategy



- Apply marketing techniques that create, communicate and deliver value in order to influence or change behaviour.
- Address perceived and real barriers.
- Encourage voluntary participation in a mandatory program.
- Use material featuring images of local waterways and beaches, linking the program to the environment.
- Encourage property owners to be present for the inspection.

Behaviours To Change

22

'Out of sight, out of mind'

Promote regular maintenance of septic systems.

 Program to identify systems with deficiencies and work with property owners to promote regular

maintenance.



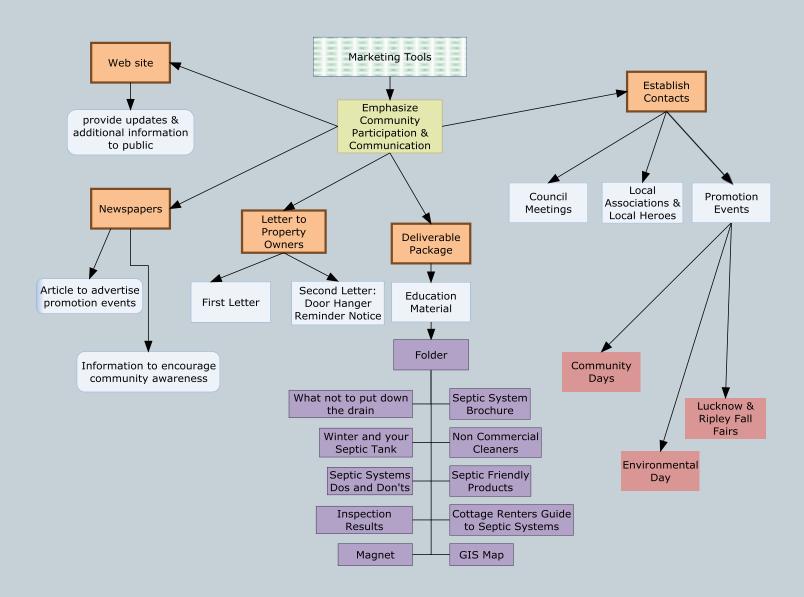




Barriers and Benefits of HKCSI

23

Barriers	Benefits
Cost	Healthy environment, environmentally sound operation of septic systems
Fear of unknown	Promotes community-based environmental stewardship
Fear of yard being torn up	Septic system education
Lack of knowledge regarding septic system	Program is township wide and inclusive of all classes of private septic systems
Owner absence (rented homes, cottages)	No upfront costs for property owners
Misconceptions about the inspection process	Non-invasive inspection
Privacy concerns	Program will provide each rate payer with visible reminder/sign of participation



Linking the Environment and Actions



PHOSPHATE FREE HOUSEHOLD PRODUCTS

Many common household products contain phosphates. When excess phosphate enters a waterway, it can cause algae blooms. Algae blooms can cause a decrease in oxygen levels, impacting fish and other aquatic species. After the algae dies, the decomposing algae can wash up along the shoreline, as a smelly, dark coloured muck.





Look for PHOSPHATE FREE products when shopping for:

- Laundry Detergent
- Dishwasher Detergent
- All-Purpose Cleaner
- Dish Soap
- Car Wash Soap
- Shampoo & Conditioner
- Glass Cleaner
- Stain Remover
- Toilet Bowl Cleaner
- Fertilizer





Septic Socials



Linking the Environment and Actions





Huron-Kinloss Water Stewardship Event Saturday July 16, 2011 10 AM to 2 PM **Point Clark Community Centre EXHIBITORS** 10:00 AM to 2:00 PM Representatives from local waterrelated groups and initiatives **GUEST SPEAKERS** 11:00 AM Dr. David Barton, Professor of Biology University of Waterloo Algae along Lake Huron SE Shoreline Arunas Liskauskas, Biologist Ministry of Natural Resources The Status of Fisheries in Lake Huron **DEMONSTRATION** 12:30 PM **Huron-Kinloss Community** Septic Inspection Program waterstewardshipevent.blogspot.com

Marketing Materials





To make an appointment for a septic inspection please call the Township office, Monday to Friday, 8:30 am to 4:30 pm (519) 395-3735



AN INTERACTIVE AND INFORMATIVE BLOG ABOUT SEPTIC SYSTEMS AND THE HURON-KINLOSS COMMUNITY SEPTIC INSPECTIONS (HK-CSI) PROGRAM





Septic Systems

Love the tank you're with.

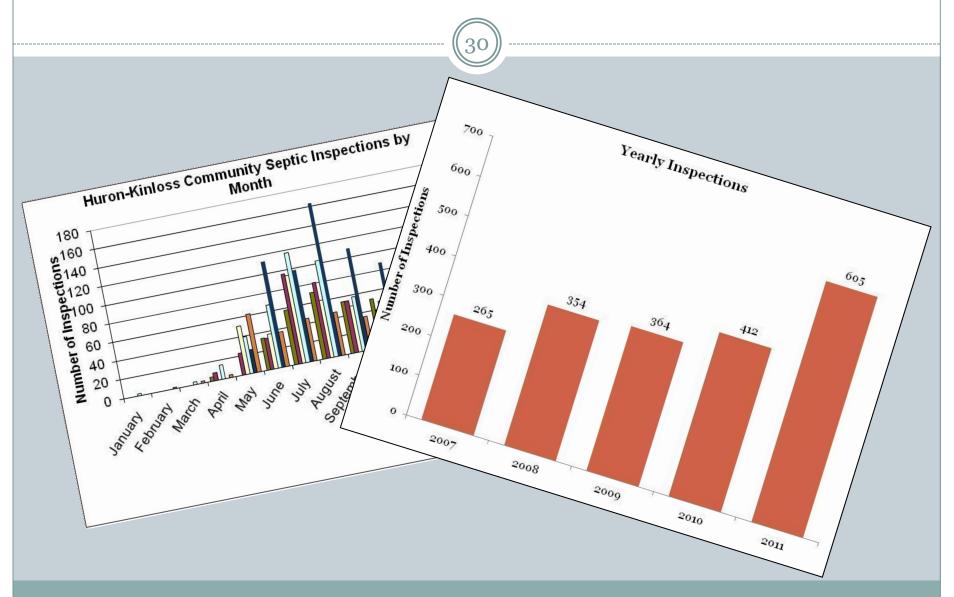


Program Evaluation



- The program is evaluated continuously:
 - What's working?
 - What isn't working?
 - What are we hearing from residents?
- The strategies utilized evolve based on the feedback that is received from the public.
- Apply the lessons learned each year, as the program goes forward.

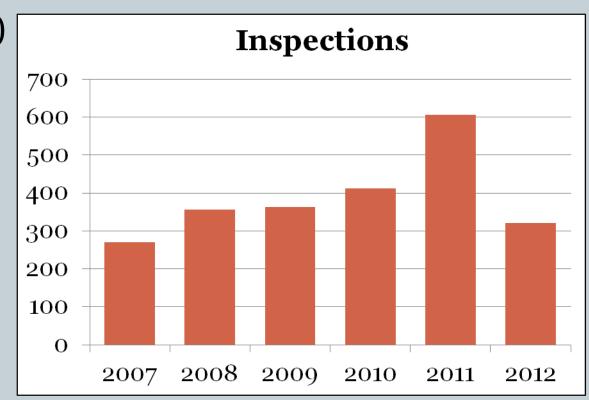
Results



A Success Story!

31

- 2,300 inspections completed (2012)
- Voluntary participation
- Promoting regular maintenance (pump-outs)
- Replacement of faulty systems



2007-2012 Risk Rating Assessment

32

Risk Assessment	2007	2008	2009	2010	2011	2012	Total
Low	202 (75%)	214 (60%)	212 (58%)	198 (48%)	279 (46%)	155 (48%)	1260 (54%)
Medium	63 (23%)	129 (36%)	134 (37%)	195 (47%)	305 (50%)	149 (47%)	975 (42%)
High	5 (2%)	13 (4%)	17 (5%)	19 (5%)	21 (4%)	17 (5%)	92 (4%)
TOTAL	270	356	363	412	605	321	2327

Repairs Required/Repairs Made 2007-2012

3 3	
5 5	

	Repairs Required			Repairs Made
Year	# Repairs	Minor	Major	
2007	35	31	4	3
2008	57	44	13	9
2009	70	53	17	35
2010	89	70	19	31
2011	125	104	21	79
2012	69	46	23	31
	did not have a repairs required in 2007 & 2008			

International Recognition



The SOLEC 2011 Steering Committee recognizes

Huron-Kinloss Community Septic Inspection Program



for exceptional performance and dedication to improving the Great Lakes.

The Canadian and United States Consuls General and the SOLEC Steering Committee, extend sincerest congratulations to your organization for the accomplishments and notable successes in conservation, pollution prevention, and restoration activities. Such efforts also serve to inspire and encourage others to assume responsibility and to take an active role in the improvement of our Great Lakes ecosystem.



Marta Moszczenska Canadian Consul General

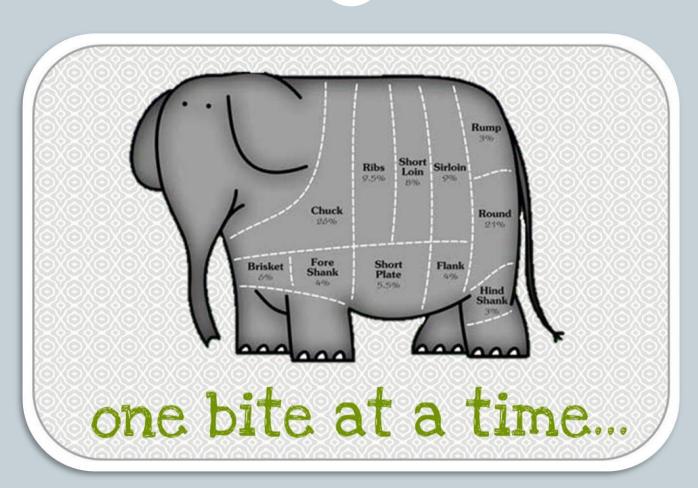


Industry Recognition



Lessons Learned



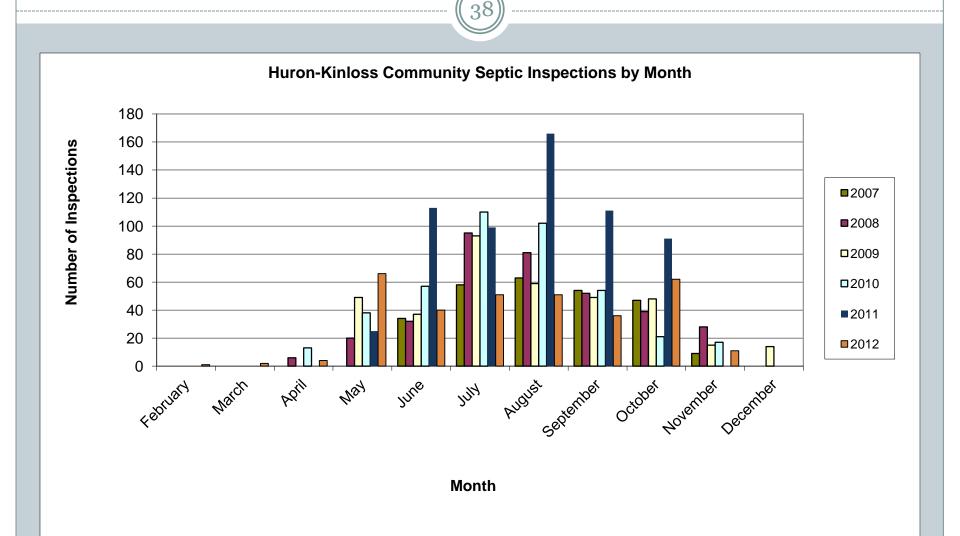


2007- 2012 YTD Completion Rate by Area

		1
3	7))
		"

No	Torrect Area	9/ Completed
	Target Area	% Completed
1	Point Clark WHPA	100.0
2	Bruce Beach South	95.9
3	BBN_Lake_Range	94.1
4	Kin-Bruce	93.2
5	Murdoch Glen WHPA	92.9
6	Jardine Creek	92.1
7	Whitechurch	91.3
8	Blairs Grove	90.1
9	Blairs Grove WHPA	90.0
10	Point Clark South	90.0
11	Bruce Beach North	88.9
12	Lurgan Beach	85.7
13	Boiler Beach	85.4
14	Kinlough	83.3
15	Point Clark North	83.8
16	Heritage Heights	67.6
17	Con10_21_86_SR20	59.5
18	Twnln_SR20_Con10_OH	59.1
19	6_1_86_BND	58.4
20	NW_Con10_SR20	57.9
21	West of 21	56.2
22	6_SR20_86_1	54.6
23	Silver Lake	53.5
24	Conc10_SR20_6_1	51.9
25	NE_6_BND	50.0
26	Con12_Con10_OH	29.2

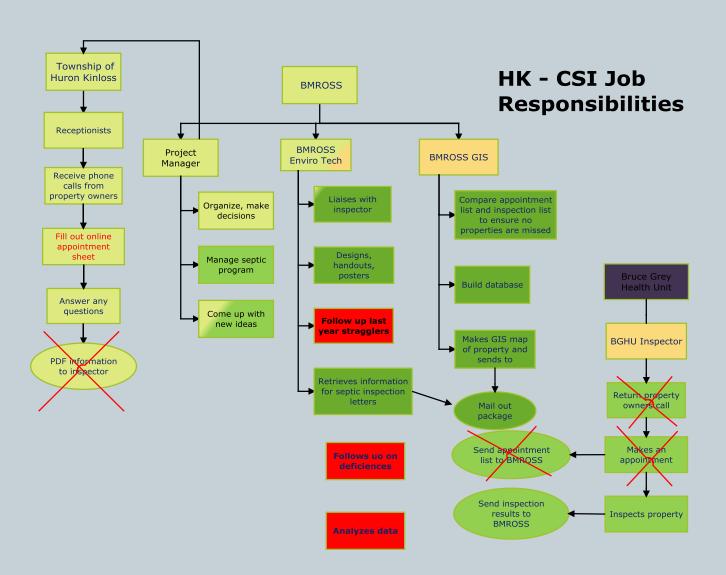
2007-2012 YTD Inspections by Month



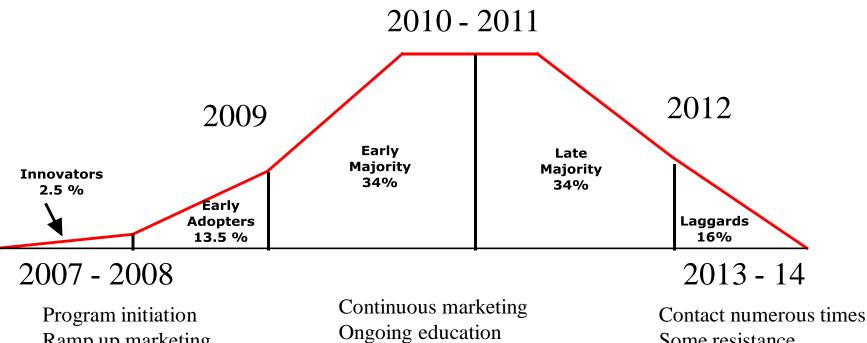
Pit Privy Inspections 2007-2012



Target Area	Count
6_1_86_BND	28
6_SR20_86_1	7
BBN_Lake_Range	2
Bruce Beach North	1
Conc10_SR20_6_1	2
Jardine Creek	1
Kin-Bruce	1
Lurgan Beach	1
NE_6_BND	14
Point Clark North	3
Silver Lake	2
TOTAL	62



Adopter Characterization on the Basis of Innovativeness



Ramp up marketing

Widespread acceptance

Some resistance Prepare for Round 2

Questions?



For more information, please contact

Matt Pearson

B.M. Ross and Associates Limited mpearson@bmross.net



