



Cottage Country Septic Systems

INSIGHTS INTO WHAT IS OUT OF SIGHT AND OUT OF MIND

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FOCA AGM



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Professional Background

OOWA

WHAT WE WILL COVER

1. Background
 2. A Brief Overview
 3. What Can Go Wrong?
 4. Current Policy Framework
 5. ECO RFR
 6. What Do We Know?
 7. What Can We Do?
 8. Q&A
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ONSITE WASTEWATER TREATMENT

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graph TD; A[ONSITE WASTEWATER TREATMENT] --> B[1 SEPTIC TANK]; A --> C[3 DRAIN FIELD]; B --> C;
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The diagram illustrates the components of an on-site wastewater treatment system. At the top, a blue sky is shown above a green grassy field. Below the ground surface, a brown soil layer contains the treatment components. On the left, a rectangular septic tank is shown with two access points labeled '1' and '2'. A pipe connects the septic tank to a series of five parallel horizontal pipes on the right, labeled '3'. Below the septic tank is a label 'SEPTIC TANK' with a vertical line pointing to it. Below the drain field pipes is a label 'DRAIN FIELD' with a vertical line pointing to it. In the center, between the two labels, is a circular symbol with a cross inside, representing a cross-section of the ground.

1

2

3

SEPTIC TANK

DRAIN FIELD



WHAT COULD POSSIBLY GO WRONG?







10/01/2014















CURRENT POLICY FRAMEWORK

PROVINCIAL POLICY & REGULATION

PROVINCIAL & LOCAL
APPROVALS AND ENFORCEMENT



ECO REQUEST FOR REVIEW: THE PLAYERS



Ontario Onsite Wastewater Association

Educators, regulators, engineers, contractors, manufacturers, suppliers, service providers, and other parties dedicated to providing the best onsite wastewater industry services



Federation of Ontario Cottagers Association

Represents the people who live at the waterfront in Ontario, whether seasonally or year-round. Members are lake and road associations of all sizes.



Environmental Commissioner

The Environmental Commissioner of Ontario is the province's environmental watchdog. Appointed by an all-party committee, the ECO is an independent officer of the Ontario Legislature

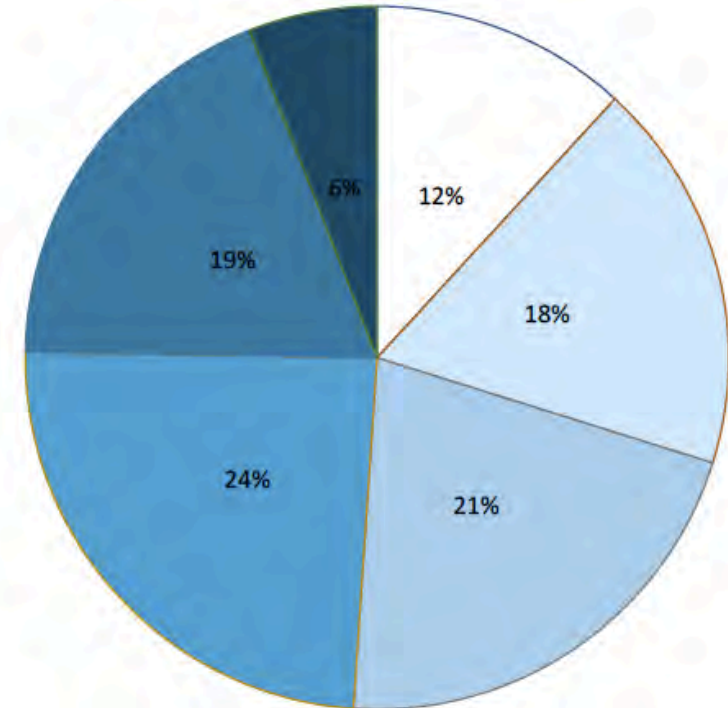
DATA SET NO.1

This data set represents inspections conducted in a one-time fee-for-service arrangement with over 370 clients between 2015 through to 2017. ESSE Canada has no vested interest in the outcomes of this analysis, other than to provide relevant and recent septic system condition information.

SYSTEM AGE PROFILES

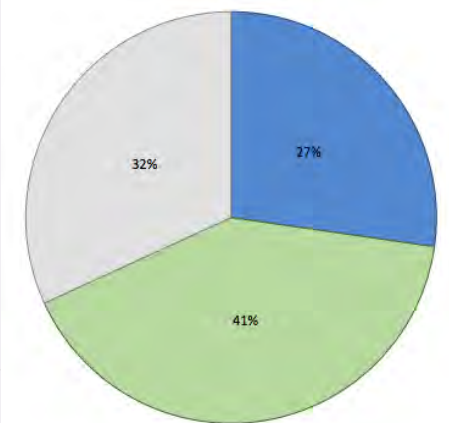
1-10 Years	12%
11-20 Years	18%
21-30 Years	21%

31-40 Years	24%
41-50 Years	19%
51+ Years	16%



SYSTEM CONDITION PROFILES

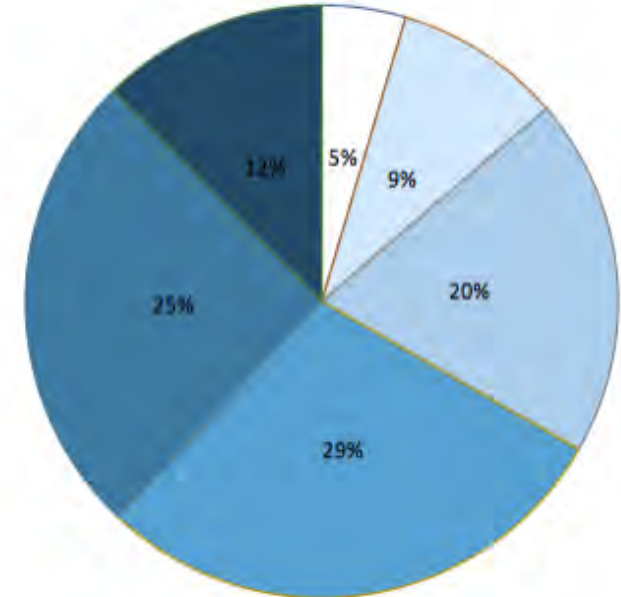
None (32%)	No Deficiencies of Note: No impediments to function or performance at the time of assessment
Minor (27%)	Minor Deficiencies: Functional but required repairs or upgrades in order to ensure performance
Major (41%)	Major Deficiencies: Deficient in significant or extreme ways, impeding function and performance



SYSTEM AGE PROFILES FOR SYSTEMS WITH MAJOR DEFICIENCIES

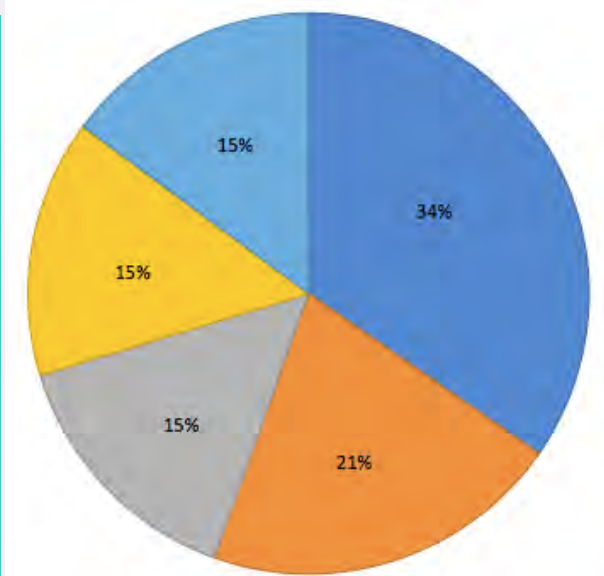
1-10 Years	5%
11-20 Years	9%
21-30 Years	20%

31-40 Years	29%
41-50 Years	25%
51+ Years	12%



MAJOR DEFICIENCIES CAUSAL BREAKDOWN

Category 1	Field Failure (34%)
Category 2	Deficient Outlet Baffle (21%)
Category 3	Saturated System Field (15%)
Category 4	Sludge in System Field (15%)
Category 5	Heavy Tank Corrosion and/or Structural Failure (15%)



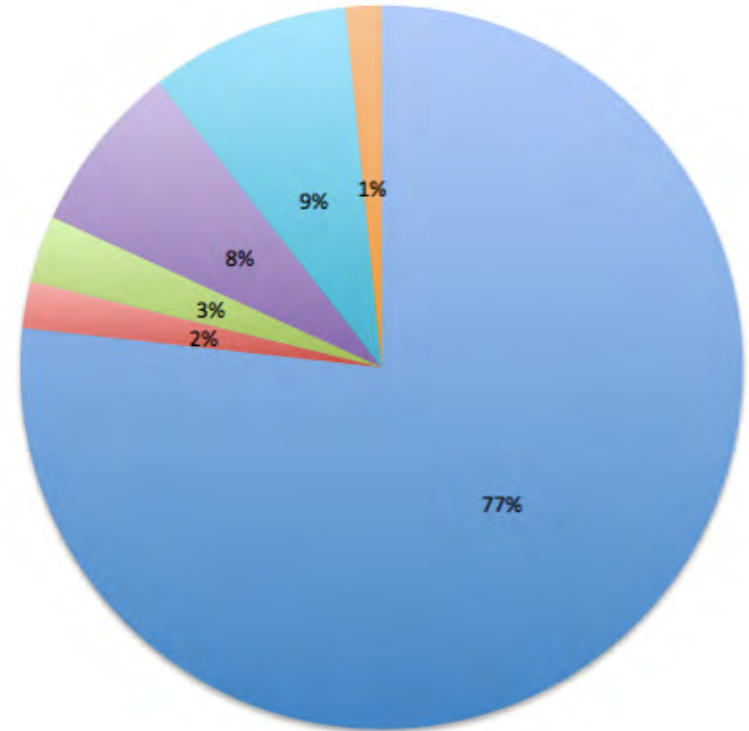
DATA SET NO.2

The following analysis and findings are based on a data set provided by WSP. The data set represents re-inspection programs at various townships at conducted at approximately 7667 individual properties, between 2013 through to 2017. WSP has administered Sewage System Maintenance Inspection Programs on behalf of the Townships requesting the program, either through the requirements of the mandatory inspection programs (every 5 years) or through a discretionary program.

MUNICIPAL REINSPECTION FINDINGS SYSTEM AGE PROFILES

Unknown Age	77%
1970-1979	2%
1980-1989	3%

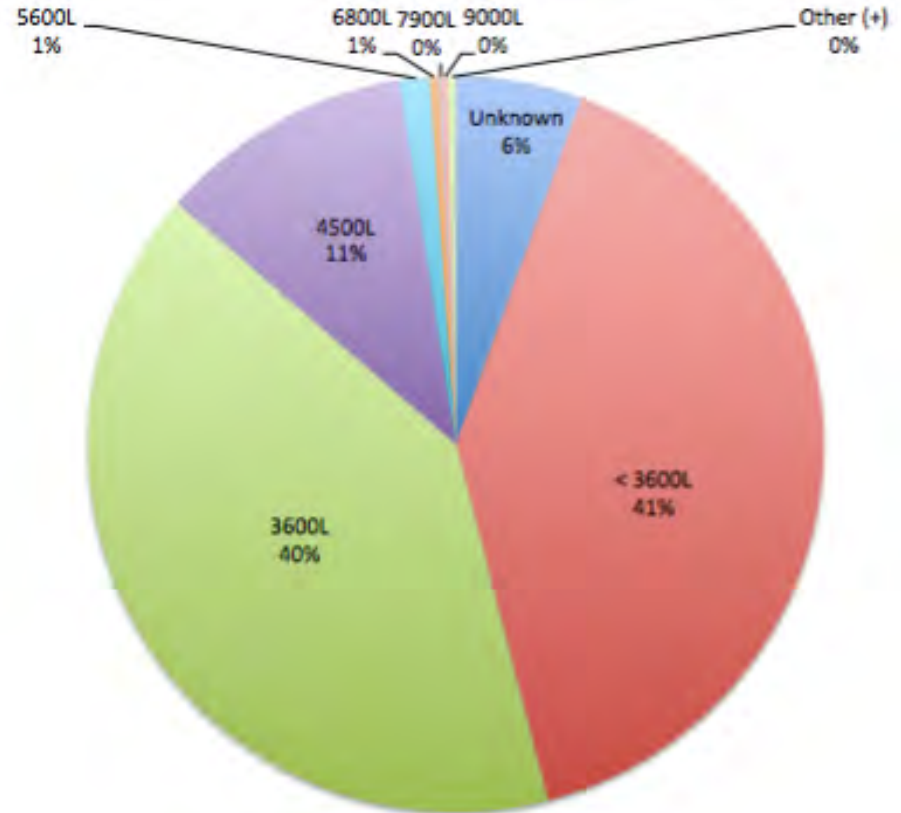
1990-1999	8%
2000-2009	9%
2010-2017	1%



MUNICIPAL REINSPECTION TANK VOLUME PROFILES

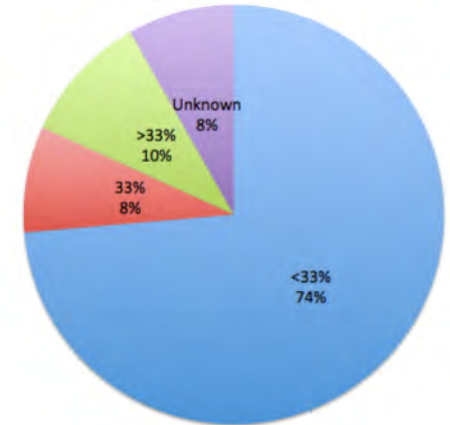
< 3600L	41%
3600L	40%
4500L	11%
Unknown	6%

5600L	0.5%
6800L	1%
7900L	0.5%
Other +	0.5%



MUNICIPAL REINSPECTION TANK SOLIDS ACCUMULATION PROFILES

Unknown	Unknown (8%)
At 33%	Pump-out due (8%)
Greater Than 33%	Pump-out over due (10%)
Less Than 33%	No pump out required (74%)



A photograph of a winter forest scene. The ground is covered in a thick layer of white snow. In the foreground and middle ground, there are several evergreen trees, likely spruce or fir, heavily laden with snow. Behind them, a dense stand of bare deciduous trees with thin, light-colored branches reaches towards a pale, overcast sky. The overall atmosphere is quiet and cold.

WHAT CAN WE DO?





DO NOT
EMPTY







PULLING IT ALL TOGETHER...



QUESTIONS?



THANK YOU!

