

# Septic Sense

Solutions for Rural Living

Alberta Onsite Wastewater Management Association Convention

February 23, 2017





# Land Stewardship Centre

Engaging, informing and enabling people and organizations to become better stewards.

# Stewardship

Our collective responsibility to retain the quality and abundance of our land, air, water and biodiversity, and to manage this natural capital in a way that conserves all of its values, be they environmental, economic, social or cultural.

# Who We Are

- Established in 1996
- Not-for-profit, charitable organization
- Governed by a volunteer Board of Directors
- Supported by program advisory committees
- Operated by core staff

# What We Do

- Understand the value of ecological services
- Recognize important stewardship priorities
- Apply key stewardship principles in land and resource use decisions
- Learn from those who provide good stewardship examples



# How We Do It

- Facilitate partnerships
- Provide services, tools and develop resources
- Collaborate on the development of stewardship practices, programs and policies
- Support provincial and national initiatives
- Work with individuals and organizations responsible for managing land and associated natural resources
- Deliver core programs

# Our Approach

## Engage – identify the need

- Individuals
- Community groups
- Partners

## Inform – build the network

- Partnerships and relationships

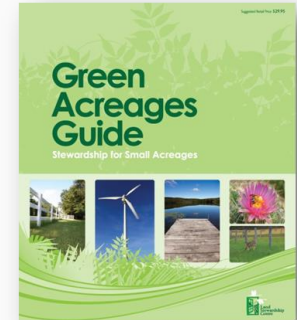
## Enable – develop the solutions

- Programs, resources and tools



# Green Acreages Guide – The Need

- Significant pressures on agricultural land close to urban centres
- Acreages represent an increasing proportion of rural landowners
- Property owners often lack knowledge and understanding of farming and rural living
- Actions can have a significant impact on natural resources
- Suitable educational resources are very limited





# Green Acreages Guide – The Solution

The Green Acreages Guide resources were developed especially for acreage and recreational property owners to help them develop and implement stewardship practices that conserve and protect the valuable natural assets associated with their properties.

- Primer
- Workbook
- Workshops
- Municipal programs

# 100

Municipalities and organizations using the Green Acreages Guide resources and workshops to support their local acreage owners.



# Green Acreages Guide – Waste Management

“If you have a thorough understanding of how your septic system works, you can then maintain and manage the system to prevent damage to the system or contamination of your property.”

*-Green Acreages Guide-*

- Regulations
- Installation
- Maintenance

# Green Acreages Guide – Waste Management

## Septic System Assessment Worksheets

- Design and location
- On-site system maintenance
- Septic or sewage system inputs

Design and Location				
System capacity	The tank is designed to handle more wastewater than required, based on the size of the home.	Capacity just meets load requirements. Factors indicating system overload are watched for. Water conservation measures are taken.	Rooms or water-using appliances have been added without re-examining the capacity of the wastewater system.	<input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low
Separation distance	Septic system is at least 9 m from any well or surface water.	Septic system is between 6 and 9 m from a well or surface water	Septic system is less than 6 m from a well or surface water.	<input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low
Age of system or holding tank	System is five years old or less.	System is between six	System is more than 20	<input type="radio"/> High
Effluent filter	An effluent filter is installed and cleaned regularly.			
Safety devices (Note: not all systems have pumps or alarms)	An alarm on the pump chamber or holding tank indicates that the tank is full or power has been cut off to the pump.			
Backflow protection	A backflow valve is installed to prevent backup during floods.			
Septic or Sewage System Inputs				
Solid wastes	No garbage in the kitchen. No grease or coffee grounds are put down the drain. Only toilet tissue is put in the toilet.	There is moderate use of a garbage disposal and some solids are disposed of down the drain.	A garbage disposal is used regularly and many solids are disposed of down the drain. Many paper products or plastics are flushed down the toilet.	<input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low
Cleaners, solvents and other chemicals	There is careful use of household chemicals (paints, cleaning products). No solvents, fuels or other hazardous chemicals are poured down the drain.	There is occasional disposal of hazardous household chemicals in the wastewater system.	There is heavy use of strong cleaning products that end up in wastewater. Hazardous chemicals are disposed of in the wastewater system.	<input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low
Water conservation	Only water-conserving fixtures and practices are used. Drips and leaks are fixed immediately.	Some water-conserving steps are taken (such as using low-flow shower heads or fully loading washing machines and dishwashers).	Standard high-volume bathroom fixtures are used. No effort is made to conserve water. Leaks are not repaired.	<input type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low

# A Good Start

But partners were asking for more information and the idea of a new program was emerging.



# Land Stewardship Centre

## What we know:

- Ecosystem services
- Surface and ground water cycles
- Watershed management
- Cumulative effects management

## What we don't know:

- Septic system design standards
- Septic system maintenance
- Septic system trouble-shooting
- Certification standards

# Collaboration

The process of two or more people or organizations working together to realize shared goals, missions or objectives.

# A Strategic Partnership

- 2011 census data indicates rural residential landowners represent 14% of Alberta's population
- We combined our expertise to design, test and deliver a new program that helps meet the growing need for septic system management





# Septic Sense: Solutions for Rural Living

- An onsite private wastewater system education and outreach program for landowners in Alberta
- Technical experts, government and industry representatives provide expertise and oversight



# Septic Sense: Solutions for Rural Living

- Designed, tested and evaluated the pilot program from February to March 2015
- Delivered five workshops in partnership with municipalities
- Strong demand and interest
- Deemed an overwhelming success



# Septic Sense: Solutions for Rural Living

In late 2015 and early 2016 we:

- Evaluated the pilot workshops
- Refined materials and presentation content
- Established an advisory committee
- Developed a plan for sustainable programming



# Septic Sense: Solutions for Rural Living

Through the rest of 2016 we:

- Raised funds for implementation
- Developed program resources
- Engaged municipal partners
- Advertised workshops



# Septic Sense: Solutions for Rural Living

In early 2017 we:

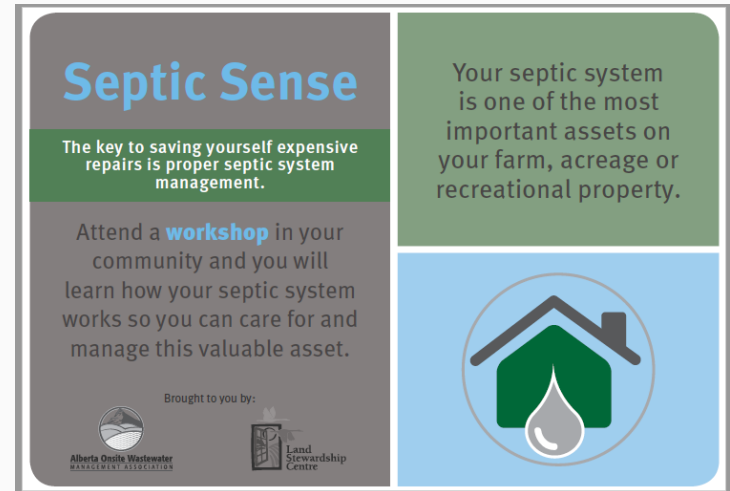
- Completed host and participant resource packages
- Scheduled 20 workshops (delivered 9 workshops to-date)
- Received excellent feedback so far



# Septic Sense: Solutions for Rural Living

Host resource package includes:

- Task list
- Postcards to market workshops
- Print ad and media release templates
- Participant registration form
- Workshop agenda
- Host feedback form



**Septic Sense**

The key to saving yourself expensive repairs is proper septic system management.


Attend a **workshop** in your community and you will learn how your septic system works so you can care for and manage this valuable asset.

Brought to you by:

Alberta Onsite Wastewater Management Association

Land Stewardship Centre

Your septic system is one of the most important assets on your farm, acreage or recreational property.



# Septic Sense: Solutions for Rural Living

## Participant package includes:

- Presentation handouts
- Do's and Don'ts and FAQs sheet
- Maintenance log sheet
- AOWMA Homeowner Manual
- Participant feedback form

### Septic System Maintenance Record

Nothing should be done without the permission and supervision of your professional engineer. Call us for more information. You have two years from the date of this record to file a return receipt for your system.

Date of Service Month / Day / Year	Contractor	Scheduled Activity	Activities Completed	Comments
Example: 4/15/16	Left Pumping Works Ltd	System inspection	System inspected	System OK

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### Septic System FAQs

If you have a septic system you must finally have questions about it. Here are the answers to some of the most commonly asked questions about septic systems. Remember, the proper operation of your septic system is essential to public and private health, to property values and to the environment.

**How do I know who is qualified to design, build or repair a septic system?**  
 Licensed septic installers, also called haulers or pumpers, who list themselves as sewage haulers.  
**How often should I have my septic tank pumped?**  
 Have your tank pumped out every 12 to 36 months unless advised differently by your maintenance person.  
**What is greywater?**  
 Greywater is untreated household waste water which has not come into contact with toilet water. It includes used water from bathtubs, showers, bathroom wash basins, and water from clothes washers and laundry tubs. It does not include waste water from dishwashers or laundry water dispensers. In the western provinces, greywater must be collected by the septic system when it goes to a septic treatment and disposal process as indicated.  
**How long should a septic system last?**  
 A conventional septic system should last anywhere from 20-25 years, or even longer, if it is properly maintained with regular pump-outs every 12 to 36 months.  
**What are some common signs that my septic system may be failing?**  
 Very small sewage odors indoors or outdoors. There is water (sewage) surfacing in your pool (often above your septic treatment component). The septic treatment component area is frequently wet and spongy. Sewage is backing up into your house. There is a change in plant growth and algae (excessive growth) in nearby ponds and lakes. Wet water tests show increased levels of nitrites and the presence of coliform bacteria.  
**How can I make sure my septic system lasts a long time?**  
 The most important things you can do to regularly maintain and pump out your septic tank. Have the tank periodically checked and inspected. Have your septic treatment component (dispersal area) inspected annually. Make sure that you do not put anything down your drains that will make it more difficult for your system to do its job. Paints, oils, fats, garbage and harmful chemicals should be avoided since they kill the "good bacteria" that break down the solid waste in your septic system.  

For more information about the Septic Sense program and workshops in your community visit [www.landbcowatship.org/septic-sense/](http://www.landbcowatship.org/septic-sense/)

Septic Sense: Solutions for Rural Living

### Septic System Do's and Don'ts

How you limit your septic system greatly affects its ability to do its job. Educating everyone in your household about what is and is not good for your septic system can help you save money and headaches, getting the life of your system, safeguard the health of your family, protect your property value and care for the environment.

**INSTALLATION**

DO

- Use professional licensed contractors to design and install your system.
- Know that if you are planning an addition that adds more than 2500 litres of water to your home, you will need to increase the number of chambers, or otherwise increase the pumping frequency, you may need to enlarge your septic system.
- Do not overload the size of your residence, add a basement suite, or other structures to a septic system without adding to the size of your septic system.
- Do not attempt to install your own septic system without the involvement of a qualified septic system installer and professional engineer.
- Do not repair or alter input to your septic system without obtaining any relevant permits.

**MAINTENANCE**

DO

- Know the location of your septic tank and subsurface treatment system, as well as the location of your system maintenance area.
- Have your system inspected by a professional every year.
- Have your tank pumped out by a professional every 12 to 36 months.
- Know the signs of a failing septic system that will be covered with unabsorbed solids during oil tests.
- Always have a good amount of funds to cover the septic tank pumping.
- Access your septic tank cover available for inspections and pumping, unless there is a safety hazard, always keep the cover sealed.
- Call a professional whenever you experience problems with your system, or if there are any signs of sewage leaks, flooding, or other wastewater problems.

**IN YOUR HOME**

DO

- Compost kitchen waste instead of using a garbage disposal.
- Strain food into the garbage instead of the sink.
- Use a drain cover to keep food from going down the drain.
- Avoid water-saving devices in the toilet that don't shut off the water when the tank is full.
- Do not flush anything other than toilet paper and human waste into the septic system including diapers and other waste.
- Fix all dripping faucets and toilets immediately.
- Take shorter showers.
- Run washing machines and dishwashers only with full loads, and only if they are full.
- Wash only one car or truck in your driveway.
- Wash only one car or truck in your driveway.

**IN YOUR YARD**

DO

- Watch for any ground surface that is soggy, spongy, or shows signs of pooling, including in your maintenance and septic zones.
- Do not allow vehicles to drive on the septic treatment component area or pump out.
- Do not pour any chemicals or near the bed, trees, roots or the septic system.
- Do not pour any chemicals, paint, grease, oil, motor oil, antifreeze, lawn care products, antifreeze, or other liquids in the septic system (water, household cleaners, hand soap, etc.).
- Do not use any fertilizers without consulting the septic tank manufacturer.
- Do not use any fertilizers such as equal, etc. or lawn care.
- Do not use herbicides that you use on the septic treatment component area.
- Do not use herbicides that you use on the septic treatment component area.

# Septic Sense Workshop

## Introduction

- What is a septic system
- How to find your septic system

## Goals of sewage treatment

- How a septic system works
- Initial and final treatment components





# Septic Sense Workshop

- Regulations
- Design and installation
- Appropriate use of your septic system
- Maintaining your septic system
- Troubleshooting



# 20

Number of workshops scheduled for  
delivery in early 2017.



# Septic Sense: Where to From Here

- Complete workshop delivery
- Summarize host and participant evaluations
- Deliver final report to partners and funders
- Secure long-term, sustainable funds



# Septic Sense: Final Thoughts

- A carefully planned and tested approach is meeting the need
- Septic Sense is supporting needs identified by homeowners, governments, industry and communities
- A better informed homeowner is better able to collaborate with industry



# Septic Sense: Final Thoughts

- The program is informing and supporting efforts in the field of waste water management
- Our collective efforts are enabling homeowners to protect their capital investment while enhancing the natural assets associated with their property



# Let's Connect

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