



Onsite

NEWSLETTER

INSIDE THIS ISSUE

| | |
|----------------------------------------------------------------------------|----|
| President's Message..... | 3 |
| Putting Septic at the Centre of Rural Lot Development | 4 |
| Throwback Article..... | 6 |
| New & Renewed Members List | 8 |
| Onsite Bites..... | 10 |
| Building Momentum on Diversifying Ownership Models | 12 |
| Installers Corner | 14 |
| A Message from OBOA Region C Director and OOWA Liaison | 16 |
| Supplier Showcase..... | 18 |
| Navigating Applicable Law | 21 |
| Part 8 Permit & Wastewater Basics Course Recap..... | 24 |
| Member Profile: Ella Bird..... | 26 |
| New Inspectors' Technique Suite | 28 |
| Looking Back At Walkerton | 29 |
| Member Profile: Jason Simpson | 33 |
| CODE Corner..... | 34 |
| Septic Awareness Week Recap | 35 |
| OOWA at the NOWRA Conference | 36 |
| The Pros and Cons of Refilling a Septic Tank with Water After Pumping..... | 38 |
| Out and About with OOWA | 40 |
| Building the Homeowner Package: Septic Know-How Made Simple..... | 42 |
| OOWA's Golf Tournament Recap..... | 44 |
| OOWA: A Finalist in Micro Business Excellence Awards | 45 |

Visit us online
www.oowa.org

Onsite First: Putting Septic at the Centre of Rural Lot Development

By: Michelle Dada, P.Eng., Consulting Engineer

In rural lot development, the onsite wastewater system isn't just a regulatory box to tick, it's the engine that makes the project feasible. Footprints, elevations, grading, stormwater, access, landscaping, and even architectural choices often depend on how and where the system is designed. After more than 20 years working with contractors, owners, and regulators across Ontario, one lesson stands out: the best projects start with onsite professionals at the table early, supported by a coordinated team.

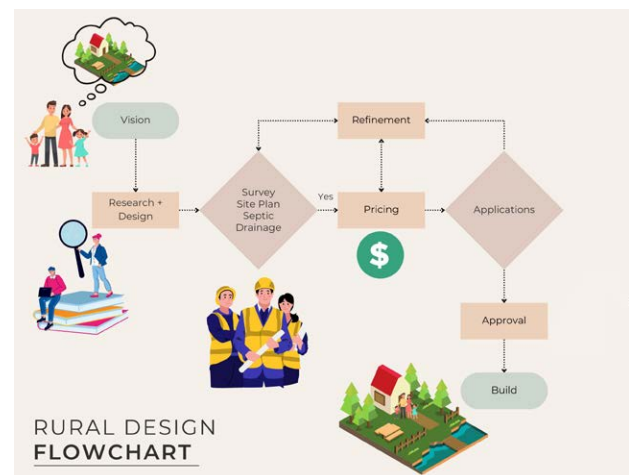
Why onsite leads the process

Approvals in Ontario are more complex and interdependent than ever. Zoning and conservation authority constraints, digital permitting, and shifting agency roles mean decisions in one discipline ripple across the others.

When onsite professionals lead early, we can:

- Prevent redesigns by locking in elevations, separations, and protection zones before building and landscape architecture are finalized.
- Shorten approvals with packages that align septic, architectural design, grading/drainage, landscaping and site layout.
- Control risk and cost by anticipating groundwater, soils, access, and maintenance needs within the design and not later when changes are more challenging.

Continued on page 4



CROMAR ENVIRONMENTAL

Eljen GSF A-42 Modules

BMEC Authorization 20-03-395

Combined Treatment and Dispersal
Using Passive Technology



No Pumps, No Blowers, No Mantle, No Problem!

STOCKING DISTRIBUTOR OF INDUSTRY LEADING PRODUCTS



Pipe & Fittings



Roth MultiTank



POLYLOK Inc.
Zabell's A Division of Polylok Inc.

MicroFAST wastewater treatment systems

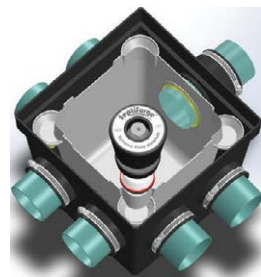
PRO-PUMP BACTERIAL CULTURES for On-Site Wastewater Treatment

BioBarrier MEMBRANE BIOREACTOR

FujiMAC Air Pumps



Regenerative Blowers



SeptiSurge

Active Even Flow Distribution Box for Septic Systems
A Dynamic Solution to a Common Septic Problem



CROMAR ENVIRONMENTAL

1000090457 ONTARIO INC.

1306 Colborne St. East, Brantford ON

519-770-0707 www.cromar.ca 1-844-770-0708

facebook



YouTube



Ontario Onsite Wastewater Association
PO Box 2336, Peterborough, ON K9J 7Y8
1-855-905-OOWA (6692) | www.oowa.org

Disclaimer: The content of this communication is provided for informational purposes only. The substance of said content does not constitute legal or professional advice or practice and should not be construed as such. While every effort is made to ensure the accuracy of the information conveyed in this communication, the Ontario On-Site Wastewater Association ("OOWA") does not warrant same. Any points of view or opinions expressed in this communication do not necessarily represent the official policies or positions of OOWA, its entities, agents, representatives, and/or any of its individual members. Readers of this communication should neither act nor rely upon any information contained herein, nor upon the content of any websites linked to or from this communication, especially for the purpose of any dispute, claim, action, demand, or proceeding, without the advice of professional legal counsel. OOWA does not accept liability with respect to any damages and/or causes of action resulting from reliance upon the information contained in this communication.

Land Acknowledgement

The Ontario Onsite Wastewater Association (OOWA) represents members from across the Province of Ontario and beyond. We respectfully acknowledge that Ontario's lands and waters are the traditional territories of many First Nations, including the Anishnaabeg, Cree, Haudenosaunee, Huron-Wendat, Mississauga, Odawa, and Petun.

Our office in Nogojiwanong, or Peterborough, Ontario, is on the traditional territory of the Treaty 20 Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations, which include Curve Lake, Hiawatha, Alderville, Scugog Island, Rama, Beausoleil, and Georgina Island First Nations.

OOWA acknowledges that the First Nations have been and continue to be the stewards and caretakers of these lands and waters in perpetuity, and that they continue to maintain this responsibility to ensure their health and integrity for generations to come.

As onsite wastewater professionals, we have a role in protecting our waterways and human health by following industry best practices and promoting the regular maintenance of onsite wastewater systems.

OOWA
Board of Directors

Bill Goodale (President)
Tatham Engineering Ltd.
bgoodale@tathameng.com
www.tathameng.com

Katherine Rentsch (Vice President)
Crozier Consulting Engineers
krentsch@cfcrozier.ca
www.cfcrozier.ca

Brenda Burrows-Rabb (Secretary)
Rabb Construction Ltd.
brenda@rabb.ca
www.rabb.ca

Danielle Ward (Treasurer)
Adams Brothers
daniellew@adamsbros.ca
www.adamsbros.ca

Andy Bauman
Bergmann North America Inc (BNA)
andy@bna-inc.ca
www.bna-inc.ca

Paul Bruinsma
Bruinsma Excavating
bruinsmaex@hurontel.on.ca
www.bruinsmaexcavating.com

Anne Egan
R.J. Burnside & Assoc.
anne.egan@rjburnside.com
www.rjburnside.com

Dan Friesen
ESI Group
dan.friesen@esigroup.ca,
www.esigroup.ca

Mike Gibbs
ESSE Canada
mgibbs@essecanada.com
www.essecanada.com

Jeremy Hein
Groundwork Engineering Ltd.
jhein@groundengineer.ca
www.groundengineer.ca

Eric Kohlsmith
Ottawa Septic System Office
eric.kohlsmith@rvca.ca
ottawasepticsystemoffice.ca

Paisley McDowell
EnVision Consultants Ltd.
pseudowell@envisionconsultants.ca
www.envisionconsultants.ca

Nico Nirschl
Liberty Pumps
nico.nirschl@libertypumps.com
www.libertypumps.com

Kathleen Shepherd
Township of Cavan Monaghan
kshepherd@cavanmonaghan.net
www.cavanmonaghan.net

Ryan Weddel
Newmarket Precast
Concrete Products Ltd.
ryan@newmarketprecast.com
newmarketprecast.com

President’s Message

A great deal has been happening at OOWA over the past few months. As we move into the closing weeks of 2025, I want to reflect on our collective journey this year and look ahead to the evolving role of onsite and decentralized wastewater in Ontario.

First, it has been a privilege to serve as the President of OOWA. It is a responsibility that I do not take lightly. I want to extend my deepest thanks to our board of directors, our committees, members, staff and our many partners across the industry for your continued dedication and support. Together we are advancing the cause of effective onsite wastewater systems, recognizing that these systems do more than simply treat effluent, they protect human health, safeguard our freshwater resources, and help enable responsible development across the province.

Second, we have been preparing for our annual convention and expo happening on March 8 to 10, 2026 at the Sheraton Fallsview in Niagara Falls. We have many exciting activities and sessions planned for this conference – don’t miss it!

Another focus this fall was septic awareness week that was held from September 15th to the 19th. We partnered with other provinces across the country to bring awareness to the onsite industry. There was a large social media campaign, press releases and a sewage system basics presentation by our Executive Director, Kelly Andrews.

We also held our first annual OOWA golf tournament on Friday, September 19 at the Harbourview Golf & Country Club. It was a resounding success, and plans are already underway for the second annual tournament in 2026. There were approximately 60 golfers out on the course to raise money for OOWA’s scholarship fund. I want to thank our staff, events committee, sponsors and everyone who helped make this a very fun day.

Here are some other things that we were up to:

- Presented and exhibited at the Ontario Building Officials Association (OBOA) conference in Huntsville.
- Hosted multiple courses in different areas across the province.
- Attended the National Onsite Wastewater Recycling Association (NOWRA) conference in Sandusky, Ohio.
- Developed our 2026 – 2030 strategic plan. Keep your eyes open for more information on this coming soon.



- Submitted code change proposals to the Ministry of Municipal Affairs and Housing.
- Trivia nights with OOWA members, staff and significant others.
- In conjunction with the Concrete Precasters Association (CPA) Conference in Thunder Bay, Ontario, hosted a Northern Ontario Education Session.
- Hosted a Burgers and Beer event at ESSE Canada in Brantford.

As you can see it has been a busy and exciting time at OOWA, with many more initiatives on the horizon. If you want to help out and get involved, please email our office at info@oowa.org or phone us at 1-855-905-OOWA(6692) and let us know what you are interested in. We are always looking for more volunteers to help bring fresh ideas to the Association.

If there is one message that I would like to leave with everyone, it is this: onsite wastewater systems matter. They deserve investment, attention and care. They are not invisible infrastructure, they are vital. Working together through OOWA, we share knowledge, foster trust, and raise awareness to support healthier communities across Ontario.

Thank you for your commitment. I look forward to what we will achieve together in the year ahead.

Bill Goodale, President



DESIGNER & MANUFACTURER OF FIBERGLASS WATER TANKS

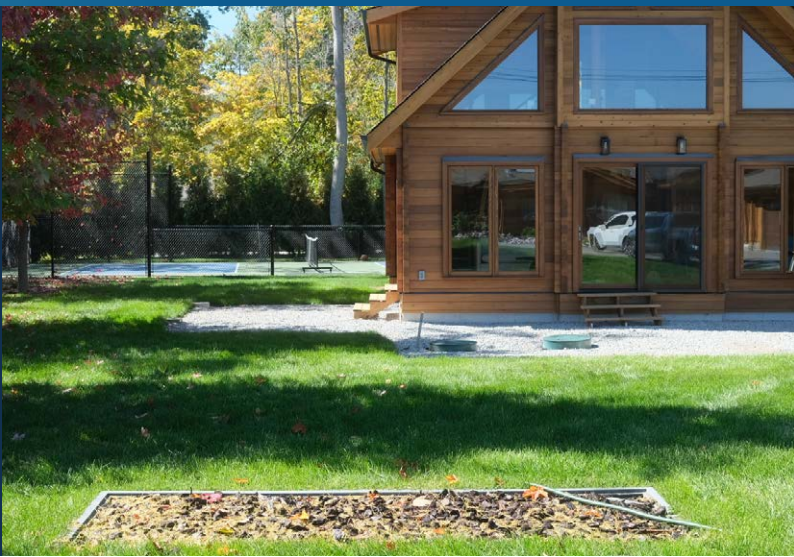
Your reliable choice for wastewater storage

granbycomposites.com



Onsite First: Putting Septic at the Centre of Rural Lot Development

Continued from Front Cover



Early moves that save projects

1. Flow & Classification

Confirm design flows and occupancy at the very start whether it's residential, an accessory dwelling unit, short-term rental, or another use. With accessory dwelling units (ADUs) and mixed occupancies on the rise, the line between an Ontario Building Code (OBC) Part 8 system and an Environmental Compliance Application (ECA) approval is critical (and based on lot-wide flows). Facing things up front avoids last-minute surprises from added occupant loads or uses and keeps your project on schedule instead of stalled in redesign or even worse: during permitting or construction.

2. Survey and Site Plan

Work from a solid starting point early and develop a site plan using an Ontario Land Surveyor (OLS) survey for the lot. Consider site topography and any special zoning setbacks along with regulated hazards as part of the design development. For tight and constrained lots, this is key to ensure you don't overpromise and underdeliver.

3. Soils, Bedrock & Seasonal High Groundwater

Verify test pits/monitoring and record seasonal high water level. In shoreline sandy areas such as along Georgian Bay, watch for fluctuating high water, wave uprush and breakout risk; in tills and clays like we have around many parts of Lake Simcoe, consider drainage and system loading area availability. Design the bed and mantle to what the site will be after building, coordinated with planned landscaping and grading.

4. Erosion, Drainage, Stormwater & Low Impact Development (LID) Coordination

Keep roof and driveway infiltration features clear of the bed influence zone, respect separation distances, and plan overall drainage. Remember: permeable hardscapes aren't harmless if they surcharge the treatment area. Installers

often arrive late in the build but before final landscaping, so it's critical to lock in protections early. Coordinate to ensure drainage is managed (e.g., crowning over the bed, apron swales), stabilization is in place (e.g., sod), and clear delineation is provided (e.g., barriers to prevent staging or traffic) immediately after system installation.

5. Access, Operations & Resilience

Keep lids, risers, filters, and alarms accessible (yearround), plan pump-out routes, and detail operations and maintenance (O&M). Confirm and handover as-built plans for future reference.

Collaboration touchpoints that move approvals

- Planner: Zoning, setbacks, lot coverage and regulatory policy.
- Ontario Land Surveyor (OLS): legal boundaries, grades and features.
- Civil/Grading Engineer: grading, swales and stormwater.
- Ecologist/Arborist: Natural heritage, hazards and associated setbacks.
- Installer/Manufacturer: Constructability, buoyancy control, O&M and homeowner training materials.

Spotlight Project: Septic System Approvals on a Challenging Georgian Bay Lot

Upgrading from a holding tank to a Class 4 septic system is rarely simple on small waterfront lots. On a recent Georgian Bay project, shallow soils, exposed granite, and zoning setbacks exceeding OBC minimums (30 m from water and 5 m from side yards) all had to be addressed.

Success came through close collaboration: an OLS provided precise grades, while the building designer, builder, installer,

and engineer coordinated to integrate the cottage footprint with septic requirements. Approvals included a minor variance, an alternative solution placing the tank 2.9 m from the lot line, and a blasting permit under the Township's by-law.

The approved system, a Waterloo Biofilter Flatbed (Type A bed) with EC-P (electrochemical phosphorus) phosphorus removal unit, delivers advanced treatment and long-term lake protection. Once built, it will replace a high-maintenance holding tank with a robust, low-impact solution, showing how coordinated design, including working with municipal planning and building departments, can unlock even the tightest sites.

Avoiding Common Pitfalls in Rural Land Development Projects

From septic systems to site grading, rural projects often face unique challenges. The good news is that with foresight and collaboration, most issues are easy to prevent. Here are a few common pitfalls and the simple steps that keep projects on track.

When teams successfully collaborate, these pitfalls become opportunities to deliver durable, resilient rural projects with fewer delays and surprises.

| Common Pitfalls | Easy Preventions |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Under-scoping flows (future ADUs, bunkies, pool houses) and triggering late re-designs | Coordinate design with full build-out in mind and confirm scope during preconstruction |
| Burying roof leaders without consideration for discharge or directing irrigation over the disposal bed and overloading the bed area | Call out overflow routes for roof drainage and every infiltration/LID feature on drawings |
| Overfilling or cutting grades that change cover thickness or mantles, or slopes that exceed OBC | Confirm grades and limits; monitor fills/cuts during construction |
| Hiding lids/vents for aesthetics, blocking maintenance | Clearly mark lids/vents on drawings and instruct contractors to keep them accessible |
| Driving or staging materials over tanks/beds and compacting the dispersal zone | Add a no-traffic / no-stockpile note and show fence limits on construction drawings |

Conclusion

Rural and shoreline projects succeed when septic isn't an afterthought but the starting point of design. By putting onsite professionals at the table early and building strong collaboration across the team, we not only avoid costly pitfalls but also deliver smarter, durable solutions for clients and communities.



About the Author

Michelle Dada, P.Eng., is a Consulting Engineer and founder of MNT Consulting Group Inc. With 20+ years' experience, she leads shoreline and rural land development across Simcoe County, York Region, Muskoka, and beyond. Her work integrates planning, grading, stormwater, and onsite sewage (OBC/MECP) with approvals-focused delivery. Michelle co-chairs the Barrie Construction Association's Women in Construction group and collaborates with contractors and authorities to advance practical, resilient projects.



Ontario Onsite Wastewater Association Throwback Article

A Look Back

This article was originally published in Vol 16, Issue 2 in August 2015

Filter Beds in Muskoka Lakes by Sandy Bos, CBO, Muskoka Lakes

The preferred onsite sewage disposal system serving the Township of Muskoka Lakes has been the Class 4 Filter bed also coined as the Whitby bed.

The small cottage lots, rugged terrain, the preference to maintain tree cover has produced a major niche for this "area" type disposal bed. Ever since the sewage systems introduction in the early 80s, the use of filter beds was a no-brainer. The system was first approved in July of 1983 (introduced in the *Manual of Policy Procedures and Guidelines for Onsite Sewage Systems*) on test-site basis; mantles and contact areas were introduced where soil conditions percolation rates ranged from 15 min/cm to 50 min/cm.

The use of the system by contractors started slow, worried about failure, but boomed by the mid-80s. The manufacturing of filter sand became a relatively simple process (once developed) for some aggregate producers. Hutcheson Sand and Gravel Limited (Huntsville) has been making filter sand for 18 years as a bi-product of the beach sand manufacturing process. They sell 16 to 18,000 tonnes of filter sand per year.

Since 1998 over 1,200 filter beds were installed in the Township of Muskoka Lakes, representing 83 percent of the sewage systems installed in the municipality representing almost \$15,000,000 in construction value.

"Effluent Treatment within a FILTER BED"

In a typical filter bed system, septic tank effluent flows into distribution pipes down through the filter medium (filter sand or Whitby sand) to the interface between the filter medium and the underlying soil. Very little treatment has occurred to this point.



Filter bed with contact area and mantle.



Raised filter bed.

It is at the filter sand — subsoil interface, (a biological layer [biomat] is formed by microorganisms, which secrete a sticky substance and anchor themselves to the soil-filter sand interface) that the treatment occurs. The biomat is formed under anaerobic conditions and provides substantial removal of bacteria and solids.

The biomat acts as a valve to slow the flow of effluent into the soil, creating a "trickle" flow in the soil beneath the biomat. The biomat can slow effluent movement to as much as 100 times less than the normal flow in saturated soil. This allows the soil to remain in an unsaturated condition (aerobic condition). Maximizes the contact time between the effluent and the soil particles in the unsaturated zone. Maintaining an unsaturated zone is the single most important factor in preventing transmission of pathogens.

A mature bed will have some ponding in the bed (filter sand). As result, finer the subsoil, greater the potential for ponding and as a result, larger the required contact area.

Aerobic conditions within the unsaturated soils beyond the bed promote aerobic decomposition.

Negatively charged soil particles attract and hold positively charged pathogenic bacteria and viruses in the effluent also known as adsorption.

If the bottom of the filter bed (for year round dwelling) is at or near the water table (seasonally saturated zone), the soil outside the bed will be saturated (that is, the availability of oxygen will be reduced or eliminated). No oxygen-no treatment.

Unabsorbed pathogens move into the shallow groundwater and can infiltrate into deeper aquifers, discharging into lakes and streams, where the public can come into contact with disease-causing organisms.

FILTER BED Site Assessment

1. Assess groundwater conditions carefully (should be done in the spring).
2. Maintain filter medium above even temporary high groundwater conditions (seasonal residence?).
3. Evaluate surrounding soil and bedrock conditions carefully. Drainage channels in and on bedrock may permit "streamlining" contaminating groundwater or surface water.
4. Direction of flow and percent slope will affect design parameters. Assess bedrock topography or soil characteristics.
5. Waterfront properties should use soils that have a high capability to retain phosphorus.
6. Waterfront lots — Increasing or maximizing the set-back for any filter bed from the high water mark should always be considered.

OOWA
ONTARIO
Onsite Wastewater
Association

**2026
Regional Meeting**

Coming to a
location
near you!

Coming Soon: Regional Meetings
Planning is underway, watch your
inbox for the announcement.



OOWA
ONTARIO
Onsite Wastewater
Association

enterprise

**ONSITE
installer**

**Clothes
That
Work** **Mark's**

PARK'N FLY

**VERGE
INSURANCE
GROUP**

NAPA AUTO PARTS

Membership Benefits
IT PAYS TO BE A MEMBER!

Swish
Proudly Canadian Since 1956

perkopolis

ES ENDLESS
SAVINGS
& MORE

CAA

ONTARIO GROUND WATER ASSOCIATION

G&T

GRAND&TOY

E-TECH

**Ontario
Rural**
Wastewater Centre

OASIS
Ontario Association of
Sewage Industry Services.

OBOA

OOWA's Member Benefits Program delivers savings on work, travel and the everyday. Sign in to your member profile to access your exclusive offers.

<https://oowa.wildapricot.org>

For more detailed information on these discounts visit our website.

<https://www.oowa.org/membership/#mem-benefits>

OOWA Members Who Joined or Renewed Their Membership

Between the Dates of July 30, 2025 and October 31, 2025

New Members

- Emily Ainsworth
- Cirilo Azucena
- Joseph Baldwin-Wilmot
- Sidney Copegog
- Donald Davis
- Luisa DiBernardo
- Angela Dixon, BNA Inc. (Bergmann North America)
- Adrian Flynn
- Brad Gaffney, Newterra
- Ann Gibson
- Luis Guardiola, Toronto Metropolitan University
- Rachel Hepburn, MECP
- Stephen Holt
- Domantas Kaciуска
- Ali Karim
- Clayton King
- Dan Leduc, Township of South West Oxford
- Raymond Leffler
- Thorntin Macdonald
- James McCullough, Yellow Brick Road Contracting
- Michael McFarlane, City of Peterborough
- Rachel Nixon
- Alexandra Peavoy
- Becki Playter, EnVision Consultants
- Anthony Ramacieri
- Roger Reaume, Make-Way Environmental Technologies Inc
- Ryan Reimer
- Santiago Reyes, BNA Inc. (Bergmann North America)
- Jaclyn Roulston
- William Saroyan
- Kelsey Sbergio
- Rebecca Schillemat, Peterborough and the Kawarthas Home Builders
- Elaf Seif, McMaster University
- Jason Simpson, Township of Norwich
- Zackary Stacey
- Beatrice Stanway, EnVision Consultants
- Parsa Tabesh, Waterloo Biofilter Systems Inc
- Anna van Milligen
- Michael Wallace
- Christopher Ward
- Riley Williamson
- Ty Zanetti

Renewed Members

- Ryan Acheson, Greenleaf Excavation
- Carl Allen, Allen Excavation
- Felipe Araque, BNA Inc (Bergmann North America)
- Angelo Avolio, Town of Amherstburg
- Richard Barg, Xylem Canada LP
- Andy Bauman, BNA Inc (Bergmann North America)
- Lars Bergmann, BNA Inc (Bergmann North America)
- Ella Bird, Birds Septic Designs & Consults
- Jacob Burley, Burley Excavating Inc.
- Christian Burrows, Yetti Construction LTD.
- Meghan Clutterbuck, R.J. Burnside & Associates Limited
- Steven Coad, Union Supply Co.
- Brad Code, Lockwood Brothers Construction
- Aaron Corbiere, E. Corbiere and Sons Contracting
- Arnie Coulson, Coulson Bros Scow Service
- Morgan Crane, MTE Consultants Inc
- Gerry Dignard, Canadian Shield Consultants
- Justin Dignard, Canadian Shield Consultants
- Angela Dixon, BNA Inc. (Bergmann North America)
- Dave Dobinson, Dave Dobinson Excavating Inc
- Stewart Dolstra, Cambium Inc
- Bill Drury, Drumax Construction
- James Eady, Eady Home Inspections
- Peter Echlin, Drummond North Elmsley Township
- David Falkanger, Town of Caledon
- Graham Fisher, Haddad Geotechnical
- Dan Friesen, ESI Group
- Perry Gingerich, P. Gingerich Excavating
- Michael Gooch, Muskoka Part 8
- Devon Haluka, Niagara Region
- Andrew Hartholt, Township of Puslinch
- Jordan Hastings, Dal Hastings Haulage & Ex. Inc.
- Trevor Hobbs, Can-Mech Agencies
- James Hotchkies, Enereau Systems Group Inc.
- Ben Hyland, Strik Baldinelli Moniz Ltd
- Jamie Inkster, MXR - Mini X Rental
- Emerson Inkster, MXR - Mini X Rental
- Nevan Inkster, MXR - Mini X Rental
- Greg Keith, Eastern Ontario Septic
- Dean Kerr, Willis Kerr Contracting
- Randy Knight, Glen Knight Septic Service
- John Lavoie, Fusion Septic
- Jeremy Lighthead, WMI & Associates
- Corey Lockwood, Lockwood Brothers Construction
- Kody Lorraine, Jasons Landscaping

- Victoria Lucas, EnVision Consultants Ltd.
- Miles MacCormack, BNA Inc (Bergmann North America)
- Tom MacIntyre, Thunderbolt Contracting Ltd.
- Paisley McDowell, EnVision Consultants Ltd.
- Scott McMullen, Verge Insurance Group (OOWA Insurance)
- Connie McVeigh, McVeigh Construction
- Bill Millar, Summit Aggregates KW Inc.
- McKenzie Millar, Robinson Excavating and Trucking Limited
- Alyssa Minassian, R.J. Burnside
- Matthew Moore, Birchview Landscaping Ltd
- Josh Munro, Cambium Inc
- Dave O'Malley, Brooklin Concrete Products
- Ayobami Elisha Oseyemi, York University
- Grant Parkinson, GEI Consultants Canada Inc.
- Rick Patterson, Drummond North Elmsley Township
- Lance Perrault, Ladcon
- kyle phillips, Township of Cavan Monaghan
- Jami Quathamer, Brooklin Concrete Products
- Roger Reaume, Make-Way Environmental Technologies Inc
- Santiago Reyes, BNA Inc. (Bergmann North America)
- Ian Robinson, BNA Inc (Bergmann North America)

- Mitch Rowley, Mitch Rowley Plumbing Inc.
- Trae Scott, Scott's Excavating & Landscapes
- Graham Shaw, Taylor Farm Sand and Gravel
- Glenn Snow, Snow Brothers Contracting
- Wilf Stefan, Clearford Water Systems Inc
- Parsa Tabesh, Waterloo Biofilter Systems Inc
- Dale Theriault, Township of Havelock Belmont Methuen
- Stephen Thibault, Brock Excavation and Septic
- Travis Toms, Township of Havelock Belmont Methuen
- Jeremy Tracey, Cambium Inc
- Mike Varty, EnVision Consultants Ltd.
- Marcel Veillette, E. Corbiere and Sons Contracting
- Paul Villeneuve, Kollaard Associates
- Rebecca Walker, Stonecairn Consulting Inc.
- Kevin Warner, Cambium Inc
- Kyle Whiteway, Whiteway Design & Build
- Ryan Williams, Williams Plumbing Solutions
- Jesse Wright, Lockwood Brothers Construction
- Qingshan (Aaron) Yin, Lakehead University
- Angie Zmija, Township of Puslinch



OOWA Insurance Program brought to you by the Verge Insurance Group

About Us

Protect your wastewater business with confidence. Coverage built for your wastewater business — not generic policies. Join our community of wastewater businesses who thrive with confidence, backed by the Ontario Onsite Wastewater Association Insurance Plan.

Program Eligibility

- Pumpers
- Installers
- Inspectors
- Portable Toilet Rentals
- Engineering Firms
- Manufacturers

Program Coverages

Commercial General Liability

- A \$25,000 limit can be added on to the CGL policy for a small fee, giving protection against spill

Environment Impairment Liability

- Protection against third party suits for contaminated soil etc.

Property Insurance

- Broad Form coverage for all buildings, contents, office contents, contractors equipment etc.

Errors & Omissions Liability

- Available for professionals with a BCIN number who perform septic system designs and inspections. This coverage protects you when providing your professional opinion.

Automobile

- For Pumping trucks.
- Service and other vehicles.

Contact Us



905-688-9170



verge@vergeinsurance.com



The OOWA Insurance Plan is administered by Verge Insurance Group



Onsite Bites: Backfill Basics — Preventing Tank and Pipe Settlement

Good installations start from the ground up.

Compaction and backfilling may not be the flashiest parts of a system install, but they're among the most important. Poor backfill practices are one of the leading causes of tank and pipe settlement — issues that can lead to misaligned piping, cracked lids, or costly callbacks.

Here's how to keep your installs rock-solid:

1. Use the Right Backfill

Stick to clean, granular material like sand or fine gravel. Avoid clay, large stones, and debris — they prevent uniform compaction and can create voids around tanks or pipes.

2. Compact in Layers

Add backfill in thin lifts (1 – 2 feet) and compact each layer before moving on. It takes more time, but prevents uneven settling later — a classic “do it right once” step.

3. Keep Heavy Equipment Clear

Steer clear of driving or compacting directly over tanks or piping. Use small plate compactors or hand tampers instead to avoid cracks or shifting connections.

4. Manage Moisture

Aim for slightly damp backfill that holds shape when squeezed — not dusty dry or soaking wet. The right moisture helps achieve even, stable compaction.

5. Check Your Work

After a heavy rain, revisit the site to inspect for signs of settlement. These issues can reveal weak spots in compaction or drainage. Always double-check before paving, landscaping, or finalizing the install — it's your last chance to catch problems before they're buried.

Quick Takeaway:

Compaction is as much about patience as it is about technique. The time you spend backfilling properly saves far more time (and reputation) than fixing a settled tank or cracked line later.



System O



It's Easy, It's Simple, It Works

NO ELECTRICITY
NO MOVING PARTS
NO MEDIA REPLACEMENT
NO MAINTENANCE (EXCEPT FOR MANDATED YEARLY)
NO 15M MANTLE
NO PUMPS/AERATORS
VERY EASY TO INSTALL
VERY VERSATILE

CAN/BNQ 3680-600



BMEC #23-05-407
Standard

BMEC #23-06-408
Nested



MAKEWAY
ENVIRONMENTAL TECHNOLOGIES INC.

System O))

Ryan 705.375.2442

Roger 226.626.9422

Bert 519.709.0681

Rainwater/Stormwater: Roddy 613.314.7597

For all your water needs, we've got you covered!

WASTEWATER • GREYWATER • STORMWATER • RAINWATER

MAKEWAY
ENVIRONMENTAL TECHNOLOGIES INC.

Coming to Canada!



Sizes from 8,500 L to 52,000 L

RIKUTEC tanks are double-walled and made of high-molecular polyethylene. These tanks can be used in a wide variety of applications! Examples: Septic Tank, Holding Tank, Fire Suppression, Rainwater Harvesting.

Call Bert for more information!

519-709-0681

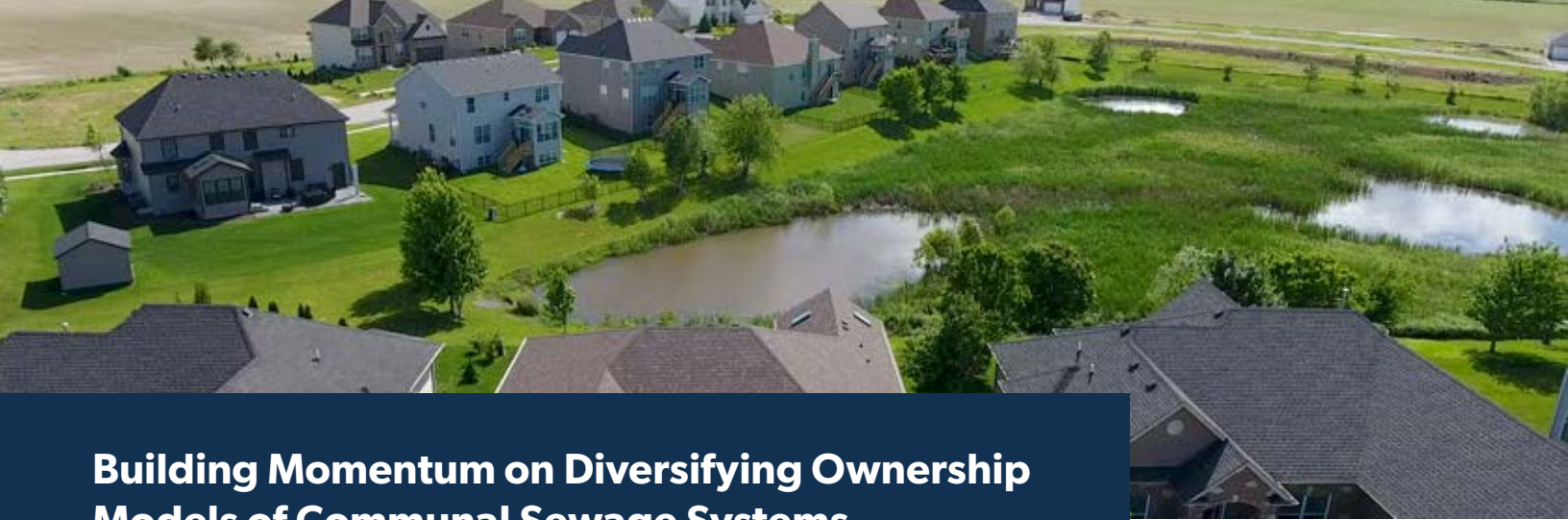
Make-Way Environmental Technologies Inc

• 168 Thames Rd W, Exeter, ON N0M 1S3 •

Tel: 519-235-1176 • Toll Free:

1.866.MAKEWAY (625.3929)

www.makeway.ca



Building Momentum on Diversifying Ownership Models of Communal Sewage Systems

By Chris Gerrits, M.Sc. (Eng.), P. Eng. and Katherine Rentsch, P. Eng.

The provision and operation of safe and reliable water and wastewater systems are critical infrastructure elements that must be available in order for municipalities and the federal and provincial governments to address the housing crisis, and to sustain economic growth and prosperity. Existing water and wastewater systems are under a variety of pressures and new systems face regulatory barriers on multiple levels. As a result, developers in rural and un-serviced areas are often limited to estate residential servicing on individual systems – an approach that yields lower housing density and may not align with current housing targets.

The current regulatory regime in Ontario strongly discourages ownership models other than municipally owned systems for communal water and sewage works. While other ownership models exist such as systems owned and operated by a private entity or a condominium corporation, the Province requires that these systems receive de facto approval from the local municipality through a Municipal Responsibility Agreement (MRA). The reality is that many municipalities are hesitant to enter into an MRA because it assumes a certain level of risk that the municipality (and their taxpayers) will have to assume the system from the Owner under certain conditions. Despite councils having a legal obligation to ensure water and wastewater systems are functioning effectively to protect human health and the environment, decisions on capital improvements can be largely driven by political will rather than based on need. The cost of the infrastructure required can also be prohibitive, often dwarfing annual budgets and constraining borrowing capacity for smaller municipalities.

An ownership model that is gaining some popularity across Ontario is the establishment of a Municipal Servicing Corporation (MSC) or a Joint Municipal Servicing Corporation (JMSC). Under Ontario Regulation 599/06, a municipality can use the power granted to them under this Regulation to establish a corporation to “provide a

system, service or thing that the municipality itself could provide”. In plain English, a municipality may establish an MSC to provide any of the services that they would normally provide.

Municipalities such as Frontenac and Mapleton have established Corporations, known as Frontenac Municipal Services and Northern Maple Utilities Inc, to deliver various services. Frontenac MS was established in late 2023 while Northern Maple Utilities commenced operations in 2025 and both aim to provide both communal water and wastewater services.

Under the MSC model, the Corporation is managed by an appointed Board that guides the corporate decision making around system operation and maintenance, as well as fees for rate payers. Similar to a hydro or gas utility, the MSC is able to charge fees for the delivery of the water or wastewater service to recover costs associated with the operation and maintenance of the system, and to fund replacements and repair as needed. The MSC model also potentially allows for greater flexibility in borrowing options and rates as the Corporation would not be constrained to the same borrowing capacity as the municipality. By transferred the borrowing to the MSC, the municipality would also free up valuable borrowing capacity which could then be used to maintain other infrastructure assets or

Photo Credit: Mayor Gregg Davidson’s X Account



Photo Credit: EngagneFrontenac.ca

facilities. Theoretically the MSC decision making would also be apolitical; decisions on capital and maintenance expenditures would be based on need and financial capacity unfettered by local political influencers.

Local Authority Services (LAS), the business services branch of the Association of Municipalities Ontario (AMO) studied the feasibility of offering a municipal utility model for water and wastewater in Ontario and delivered the “Report of the Expert Panel on the feasibility of a water and wastewater utility model to be offered by LAS” in 2024. The expert panel examined both joint municipal service corporations and joint municipal services boards, both of which are permitted to be established under the Municipal Act. The expert panel reviewed the feasibility of a utility business model, including how to best structure and arrange the governance of a municipal service corporation for the water and wastewater sector. It also examined funding opportunities from user rates and other potential sources, as well as the use of debt and reserve funds, including economic regulation. Ultimately the expert panel recommended that joint municipal service corporations should be open to all Ontario municipalities, although participation would be voluntary among other recommendations.

LAS then launched into a pilot project to develop a business case to evaluate whether a joint municipal services corporation (JMSC) would be a financially sound and practical solution for some of Ontario’s water and wastewater infrastructure challenges. The JMSC model is like the MSC model on steroids; rather than one municipality developing an MSC to handle their water and wastewater systems, the JMSC would be a collaboration of many

municipalities pooling their assets under a single corporate umbrella. This is not to say that the municipalities operating under a future JMSC would physically interconnect their systems, rather than the operation and planning would be facilitated through the Board. Similar to the MSC model, the JMSC model would also potentially free up municipal debt capacity, the strength of the JMSC is that widespread planning for capital and maintenance can benefit from true economies of scale, efficient planning of capital works and offer a level or protection to the cooperating municipalities in terms of financial and risk exposure.

While the MSC and JMSC models are tools that could potentially assist water and wastewater assets, it is not a silver bullet. Many municipalities currently do not charge water and wastewater rates on a full cost recovery basis meaning that the budgetary shortfalls are being subsidized by the general tax levy. An MSC or JMSC model should be based on full cost recovery meaning that many customers will see a short term increase in their water and wastewater rates. This doesn’t mean that the rates will continue to increase indefinitely, the idea with the MSC and JMSC model is that there are efficiencies to be realized through better

management, but there will be some growing pains if these models are going to be established.



Photo Credit: Credit Association of Municipalities of Ontario

The MSC model offers new path forward that developers and municipalities should consider when looking at ways to support new development. It may not fit every opportunity, but having a diversity of ownership models increases the likelihood that successful projects can be undertaken, that protect public health and the environment. There

are many opportunities for OOWA members if communal sewage works become more prevalent, from opportunities for equipment and technology manufacturers, to operation and maintenance as well as all the soft skills required to support implementation. OOWA should continue to support these initiatives at the local and provincial level and look for opportunities to assist with implementation.



About the Authors

Chris and Katherine are both Professional Engineers with C.F. Crozier & Associates Inc., where they bring deep-rooted passion and practical expertise to their work in water and wastewater servicing. Chris’s lifelong involvement in water supply began in his family’s water well drilling business, and today he continues to serve his community as Mayor of Amaranth Township and Councillor for Dufferin County. Katherine, who grew up on a farm in Dufferin County, developed a strong interest in rural infrastructure early on. She entered the onsite industry through her first role at R.J. Burnside & Associates—and hasn’t looked back since.



Photo Credit: MXC Excavating Inc.



Installers Corner

Dylan Martin, MXC Excavating Inc.
Serving: Haldimand, Niagara, Hamilton



What advice would you give to contractors wanting to make a go of installing septic systems?

Start by learning the code and the soil before worrying about machines or materials. The Ontario Building Code (Part 8) isn't just paperwork — it's the backbone of how systems function. Take the time to understand T-times, separation distances, and how water actually moves through the ground. That knowledge is what separates a good installer from a dirt mover.

Build relationships with local designers, inspectors, and suppliers. Septic work depends heavily on cooperation — clear communication with the designer saves headaches in the field, and mutual respect with inspectors makes approvals smoother.

Invest in quality tools and equipment, not shortcuts. A laser level, proper compaction gear, and clean bedding material make the difference between a system that passes inspection and one that gets called back.

Keep your documentation tight — photos, elevations, and as-builts protect you if there's ever a dispute.

And finally, treat every install like it's on your own property. Septic systems are buried and forgotten until something goes wrong; doing it right the first time builds a reputation that will outlast any ad campaign.

In your opinion, what do you see as the three most challenging technical issues faced by septic system installers today?

Site Conditions and Design Constraints

Installers are often tasked with fitting systems onto properties with challenging soils, high groundwater, limited space, or steep grades. Balancing code compliance with real-world conditions requires creativity, precision grading, and frequent coordination with designers or engineers.

Evolving Regulations and Documentation

Frequent updates to the Ontario Building Code and varying municipal interpretations add layers of complexity to every job. The growing volume of required forms, drawings, and inspection records demands careful attention to detail and efficient digital record-keeping.

Advanced Treatment Technologies and Maintenance

Modern treatment units improve effluent quality but introduce new technical challenges. Installers must manage electrical components, sensors, and system calibrations while ensuring homeowners understand ongoing maintenance requirements to keep warranties valid and systems functioning properly.

Material Quality and Supply Chain Reliability

Consistent access to certified materials — from ASTM C33 filter sand to properly rated tanks and distribution components — is an ongoing issue. Supply delays or inconsistent quality can directly impact performance, scheduling, and long-term system reliability.

Briefly, how might these be addressed?

Smarter Site Evaluation and Design Collaboration

Early, detailed soil testing, accurate elevation mapping, and open communication between installers, designers, and inspectors help ensure systems are matched to real field conditions before work begins.

Digital Record-Keeping and Standardized Processes

Using software for drawings, permits, and job documentation reduces errors and saves time. Standardized checklists and templates keep projects compliant across changing regulations.

Focused Training and Maintenance Partnerships

Investing in manufacturer training and limiting installations to a few trusted system types ensures quality and consistency. Clear homeowner education and service agreements protect both performance and reputation.

Verified Materials and Reliable Suppliers

Working closely with certified pits, tank suppliers, and distributors — and verifying material specs upon delivery — prevents costly rework and helps maintain system integrity long-term.

What would be the most impactful thing that OOWA could do to improve the industry?

The most impactful thing OOWA could do is help close the gap between design and installation in the field. Too often, installers are handed engineered drawings that don't fully reflect site realities — soil conditions, elevations, or access issues — which leads to costly changes, frustration, and inconsistent system performance.

OOWA is in a unique position to bring designers, installers, inspectors, and regulators to the same table through joint training, regional workshops, and standardized best-practice guides. Encouraging collaboration early in the design process would reduce mistakes, improve compliance, and build trust across all sides of the industry.

In addition, expanding OOWA's support for hands-on training and certification pathways — especially for younger contractors — would help raise technical standards while attracting new talent into the trade.

Ultimately, stronger communication, consistent training, and practical education are what will elevate the onsite wastewater industry across Ontario.

How do you communicate homeowner operation and maintenance responsibilities to your clients when the install is complete?

At the end of every installation, I make a point to walk the homeowner through their system in person — showing them where each component is located, how it functions, and what basic maintenance is required. Seeing it firsthand helps them understand that a septic system isn't "set it and forget it."

I also provide a simple operation and maintenance sheet that outlines what to expect, what not to flush, inspection intervals, and who to contact for service. For advanced treatment systems, I include the manufacturer's manual and discuss the importance of staying on a maintenance contract.

Clear communication at handover prevents future problems and callbacks. Homeowners appreciate when it's explained in plain language — not technical jargon — and it reinforces that the system's performance depends as much on proper use and care as it does on the quality of the installation.



OBOA at OOWA Convention & Tradeshow 2025

Strengthening Connections: A Message from Your New OBOA Region C Director and OOWA Liaison

By: Kaiyla Hoffmann
Region C Director, Ontario Building Officials Association
Administrative Assistant – Building/Planning, Township of Armour

It is with great enthusiasm and a deep sense of responsibility that I introduce myself as the newly appointed Region C Director for the Ontario Building Officials Association (OBOA). I am equally honoured to serve as the official liaison between the OBOA and the Ontario Onsite Wastewater Association (OOWA).

This dual role presents an exciting opportunity to foster collaboration between two organizations that are critical to the safety, sustainability, and innovation of Ontario's built and natural environments. As building officials and onsite wastewater professionals, we often find ourselves working towards shared goals — ensuring public health, environmental protection, and compliance with Ontario's regulatory framework.

A Shared Mandate for Safe, Sustainable Development

The intersection between our professions is significant. From permitting and inspections to system design and enforcement, building officials and wastewater practitioners are integral to the lifecycle of safe, code-compliant, and environmentally responsible development — particularly in rural and unserved areas. The importance of communication and alignment between our associations cannot be overstated.

As liaison, my role is to facilitate that dialogue — to share insights, identify emerging challenges, and support ongoing learning and policy development that benefits both OOWA and OBOA members. I will work to ensure that your voices are heard at the OBOA table, just as I will bring back important updates and initiatives that impact our collective work in the field.

Looking Ahead: Opportunities for Collaboration

Some key areas I hope to focus on during my term include:

- Clarifying and streamlining inspection protocols for onsite systems through consistent interpretation and application of the Ontario Building Code.
- Encouraging joint training and workshops that bring together OBOA and OOWA members to share expertise and stay informed on technological and regulatory changes.
- Identifying challenges in the field — from enforcement gaps to permitting delays — and working together on solutions that serve the public interest.
- Supporting innovation in decentralized wastewater treatment through policy alignment and mutual education.

I firmly believe that a strong, transparent relationship between OBOA and OOWA is not only beneficial — it's essential. Whether it's navigating changes to Part 8 of the Building Code or tackling broader issues like climate resilience, our collaborative efforts will lead to better outcomes for Ontario's communities.

Let's Connect

I look forward to working closely with the OOWA Board of Directors and membership, listening to your perspectives, and championing initiatives that bring value to both associations. If there are issues you would like to raise, areas where you see room for improvement, or innovative ideas you believe we should explore together, please don't hesitate to reach out.

Together, let's build stronger bridges between our professions and contribute to a safer, healthier Ontario.

Sincerely,

Kaiyla Hoffmann
Region C Director, Ontario Building Officials Association (OBOA)
Liaison to the Ontario Onsite Wastewater Association (OOWA)
buildingadmin@armourtownship.ca



OOWA at OBOA AMTS Conference 2025

PENTAIR HYDROMATIC

Delivers waste water pump solutions to the North American commercial, municipal and industrial markets.



Get it Now at



**Near North
Supply**

PLUMBING
GROUNDWATER
WASTEWATER
WATER CONDITIONING

nearnorthsupply.com • 705-721-9112 • 191 Big Bay Point Rd, Barrie





SUPPLIER SHOWCASE

Waterloo Biofilter Systems Inc.



Photo Credit: Waterloo Biofilter

What products or services do you offer to the onsite wastewater industry?



At Waterloo Biofilter Systems Inc., we specialize in innovative, low-maintenance, and environmentally responsible onsite wastewater treatment technologies. Our products and services are designed to protect water resources while delivering reliable performance across a wide range of applications, from residential to commercial and remote installations. Our core products are the Waterloo Biofilter Foam Treatment Unit, the Waterloo MBBR System (Moving Bed Biofilm Reactor), the WaterNOx for Nitrogen reduction, and the Waterloo EC-P for Phosphorus reduction. We also offer system design support, technical training to installers and designers, ongoing technical support, and the annual system inspections as dictated by the Ontario Building Code.

What geographic areas do you serve?



Waterloo Biofilter Systems Inc. is proudly based in Guelph, Ontario, and serves a wide range of regions across the entire Canada and the United States with commercial projects worldwide.

What is one thing you want our members to know about your company?

One thing we want your members to know is that Waterloo Biofilter is driven by purpose as much as by performance. For over 30 years, we've been committed to protecting our water resources by providing reliable, low-energy, and low-maintenance onsite wastewater treatment systems. Our made-in-Canada technology is not only built to meet strict environmental standards but also built to last. Whether you're in a remote coastal community or a growing rural development, we're here to support you with expert guidance, responsive service, and a proven system that works in real-world conditions.

How do you support your community? (Sponsorships, donations, volunteering, collaborations, etc.)

At Waterloo Biofilter, supporting our community is an important part of who we are. We contribute through sponsorships, donations, and collaborations that align with our values: protecting the environment, supporting education, and building strong local partnerships. We sponsor industry training events, golf tournaments, and regional association meetings that help strengthen the onsite wastewater community. Each year, our team also organizes a food drive for the Guelph Food Bank, helping to support local families in need. We're proud to work with educational institutions and municipalities to promote responsible wastewater management and help build a more sustainable future for the communities we serve.

Do you have any exciting new projects, products, or events coming up?

Yes! We're excited to share that Waterloo Biofilter has once again been recognized by The Globe and Mail as one of Canada's Top Growing Companies, marking its third time receiving this honour. It's a reflection of the hard work and dedication of our team, as well as the trust and support of our partners across the industry. Looking ahead, we're gearing up for another busy season of training and outreach. Our Designer Training Course will return this November, offering in-depth technical guidance and system design best practices for engineers and designers. We're also planning a full series of training sessions across Ontario in January and February, designed to support installers, service providers, and municipal officials with hands-on learning and updates on our technologies.

Where can people learn more about your company?

To learn more about Waterloo Biofilter Systems Inc., visit our website at www.waterloo-biofilter.com, where you'll find detailed information about our products, services, and upcoming training events.

You can also follow us on Instagram, LinkedIn, and Facebook for company updates, project highlights, and industry news.

If you'd like to speak with someone directly, give us a call at 519-856-0757, we'd be happy to help!



Name:

Dana Jagt

Name of your business:

Waterloo Biofilter Systems Inc.

What is your title:

Sales and Office Coordinator

Waterloo Biofilter Systems Inc. is a Canadian-owned and operated company that develops, designs, manufactures, and maintains advanced onsite wastewater treatment systems. We are committed to high quality treatment, low electricity usage, and system robustness. Since the first pilot installation in 1991, our technology has proven itself to be the most reliable system available. Incorporated in 1995, our company continually strives to lead the industry in innovation and service. We are responsible for numerous advances in our field, both scientific and technological, that are used every day to help protect our natural environment and water supplies.



2026 Annual Convention & Expo

Dates: **March 08 – 10, 2026**

Venue: **Sheraton Fallsview, Niagara Falls**

Registration: **Now Open!**

Get More info at:

www.oowa.org/events/2026-annual-convention-expo/

[View Online](#)

As we prepare for the 2026 Annual Convention & Expo, we're pleased to announce our keynote speakers:

Keynote Speaker:

Kate Campbell
Contractor & TV Personality

Presenting:

Build It Anyway: Lessons in Resilience, Vision, and Rebuilding from the Ground Up

Keynote Speaker:

Thammarat Koottatep
Professor and Co-Director, Global Water & Sanitation Centre, Asian Institute of Technology, Thailand

Presenting:

Climate-wise Inclusive Sanitation - Challenges and Innovations

Navigating Applicable Law: Understanding the Gatekeeper of Ontario's Permit Process

By Devon Staley, CBO and Inspection Services Manager, RSM Building Consultants

The Invisible Step Before Every Permit

Whether you've submitted a permit application only to be told "we're waiting on applicable law," or you're the one delivering that message to a frustrated applicant, you know the confusion it creates. For many in the onsite wastewater industry, that phrase feels vague and bureaucratic. But applicable law is far more than paperwork. It's the network of provincial legislation ensuring every permit issued in Ontario protects public health, land use, and the environment. It is the gatekeeper of Ontario's permit process, even when an application meets the requirements of Part 8.

What Is Applicable Law?

Under the Building Code Act, a chief building official cannot issue a building permit until all applicable law requirements are met. The term appears in sections 8(2), 8(3), and 10(2) of the Act and is outlined in Ontario Building Code Division A, Article 1.4.1.3., and for conditional permits, Division C, Article 1.3.1.5.

Applicable law comprises more than 30 provincial Acts and regulations governing where and how development can occur. Each focus on a specific public interest, such as heritage preservation, source water protection, or development control near highways and wetlands. These laws vary depending on whether the building permit is for new construction or alterations, conditional permits allowing limited preliminary work, or change of use permits where a building's function changes but no construction is proposed or required.

For wastewater professionals, applicable law often requires coordination with conservation authorities, risk management officials, or planning departments before construction begins.

Why It Matters to the Wastewater Industry

Applicable law connects individual projects to Ontario's legislative requirements. The Clean Water Act requires confirmation from a risk management official before installing a septic system in a source water protection area. The Conservation Authorities Act regulates development near wetlands and waterways, requiring a separate permit before building permit issuance.

Each approval protects something different: groundwater, shorelines, or habitat. Together, they prevent environmental impacts that may not be obvious on a site plan. For designers and

installers, understanding applicable law means fewer delays and surprises. Missing one approval can postpone permit issuance or invalidate a permit if construction begins prematurely.

How the Process Works

When a permit application is submitted, the building department performs a completeness review. Some municipalities exercise their right to refuse an incomplete permit submission within two business days, while some build the review into their 10-to-30-day technical review period. Key players include:

- Applicant: Obtains all external approvals
- Permit Coordinator or Plans Examiner: Verifies any required approvals are attached and current
- Chief Building Official: Confirms applicable law is satisfied before issuance
- Inspector: Ensures ongoing compliance during construction

While the requirement is consistent across municipalities, interpretation and processes vary. Some jurisdictions require formal approval letters; others accept email confirmations; some rely more heavily on the applicant completing self-assessment checklists. The best approach is early coordination. Confirm required approvals in your area before applying. This is especially critical for septic system installations, properties near regulated watercourses, and rural lots with special zoning or environmental conditions.

Common Acts Triggering Applicable Law

Several Acts appear frequently in wastewater-related projects:

Clean Water Act (2006): Section 59 requires approval from a risk management official where a Source Protection Plan applies.

Conservation Authorities Act: Sections 28 to 28.1.2 regulate development in floodplains, wetlands, and erosion-prone areas.

Planning Act: Sections 33, 34, 38, and 41 govern demolition, zoning, interim control by-laws, and site plan control.

Public Lands Act: O. Reg. 239/13 sections 2 and 5 regulate construction on shorelands. A work permit may be required if a sewage system extends into that zone.

Continued from previous page

Environmental Protection Act and Environmental Assessment

Act: May apply where land was previously used for waste disposal or where a project triggers environmental review.

Nutrient Management Act: Section 11.1 of O. Reg. 267/03 requires a nutrient management strategy when constructing or expanding a building to store nutrients or house farm animals.

Niagara Escarpment Planning and Development Act: Subsection 24(3) requires approval for all building permits within the development control area.

Public Transportation and Highway Improvement Act:

Section 34 and 38 requires a permit from the Ministry of Transportation when constructing or altering a building or land within specified distances from King's Highway and Controlled Access Highway.

Nearly every wastewater project intersects with at least one of these Acts, particularly in Southern Ontario where conservation authority jurisdiction and source protection policies are common.

Conditional Permits

Conditional permits (BCA section 8(3) and OBC Division C 1.3.1.5) allow limited construction while some approvals remain outstanding. However, the chief building official must be satisfied that a pared down list of applicable law is met, that the municipality has an agreement in place with the owner, and that compliance with the remaining applicable law items and any outstanding building code requirements will be achieved before full permit issuance.

For wastewater projects, conditional permits are uncommon. Because environmental protection and water quality are central to onsite systems, approvals from conservation authorities and risk management officials are usually required before any ground disturbance.

Change of Use Permits

Change of use can be more complex than new construction. Under BCA section 10(2) and OBC Division A 1.4.1.3(2), the list of applicable laws expands to include any law affected by the new occupancy. Converting a rural garage into a dwelling unit with a septic system could trigger a Planning Act review for zoning compliance, a Conservation Authority permit if near a watercourse, and a Clean Water Act review for source water protection.



Who Coordinates It All

Responsibility for confirming applicable law is shared. The applicant should identify any approval letters or permits that they require prior to permit application, and at the application stage, they provide proof of compliance; the building department is then responsible to review and verify it before permit issuance. Many municipalities now include applicable law checklists with submission packages or assign a dedicated reviewer to coordinate communication between planning and building divisions.

Looking Forward

Ontario's focus on faster housing construction through the More Homes Built Faster Act has pressured building departments to issue permits quickly. Meanwhile, the web of applicable law continues evolving.

For wastewater professionals, this means early coordination, clear documentation, and awareness of local regulations are more important than ever.

Final Thoughts

Applicable law is the framework holding Ontario's permit system together, linking technical design, environmental protection, and legal compliance in one process. For wastewater professionals, knowing which laws apply goes beyond avoiding delays—it ensures the systems we design and install protect the resources our communities depend on.



The OASIS Conference and Trade Show is the largest hauled sewage, septic, and portable toilet conference in Ontario! Whether you're focused on staying compliant, upgrading equipment, or finding smarter ways to run your business, this is the event that helps you do it all—under one roof.

DATE & LOCATION

JANUARY 29 – 31, 2026

THURSDAY - SATURDAY

CASINO RAMA RESORT

5897 RAMA ROAD, RAMA ON

EVENT HIGHLIGHTS

- ANNUAL GENERAL MEETING
- ENGAGING SPEAKERS
- ONSITE TRAINING & NETWORKING
- EXHIBITION & LIVE DEMONSTRATIONS
- AWARDS BANQUET & SILENT AUCTION



About the Author

Devon Staley is the Chief Building Official and Inspection Services Manager at RSM Building Consultants. With over 16 years of experience in plans examination, inspection, and building department administration, she brings a deep understanding of both municipal operations and industry best practices. A Certified Municipal Manager through the Ontario Municipal Management Institute, Devon combines her technical expertise with practical insight gained from roles in municipal government, residential construction, and design.

Register today!

www.oasisontario.on.ca

(289) 795-2528



Part 8 Permit Application Review Course Recap

OOWA hosted its latest Part 8 Permit Application Review course on October 8, 2025, at the North London Optimist Community Centre, welcoming members for a full day of hands-on training and discussion. Led by Brad Smale, Chief Building Official for the Township of South-West Oxford, the session offered in-depth training on the regulatory requirements for onsite sewage systems under the Ontario Building Code.

Designed for those who have completed the Five-Day Part 8 Licensing Course or have equivalent experience, the course provided a detailed walkthrough of the permit application and review process. Participants explored design criteria, system configuration, and soil analysis, supported by real-world case studies that brought technical concepts to life.

Attendees responded positively to the course's structure and delivery. One participant shared, "I thought the handouts and real-world examples were great." When attendees were asked if they would recommend this course, "Yes, I think it was a great course to learn."

OOWA staff also received praise for their behind-the-scenes support. One attendee remarked, "Excellent job organizing! There were lots of resources available, they handled technical difficulties well, and the food was delicious."

OOWA thanks Brad Smale for his expert instruction and all participants for their thoughtful engagement. We remain committed to offering high-quality, hands-on training that supports the growth and professionalism of our industry.



“ Participants Thoughts on The Course:

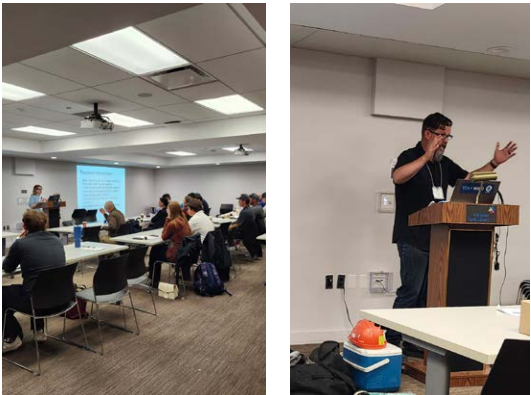
"I thought the handouts and real-world examples were great."

"Yes, I think it was a great course to learn."

“ Participants Thoughts on The Staff:

"Excellent job organizing! There were lots of resources available, they handled technical difficulties well, and the food was delicious."

Wastewater Basics and Biological Health & Safety Course Recap



OOWA hosted the one-day workshop of Wastewater Basics and Biological Health & Safety on October 9, 2025, at Kitchener Central Library, welcoming members for practical, field-focused training. The program featured Wastewater Basics, taught by Anne Egan, R.J. Burnside & Associates, and Biological Health & Safety Awareness, taught by Rick Esselment, ESSE Canada.

The Wastewater Basics session covered onsite wastewater and soil treatment theory, industry terminology, treatment objectives for different systems, and sampling techniques. Hands-on elements included soil samples, demonstrations of sampling equipment, and visual aids.

The Biological Health & Safety Awareness session addressed microbiology of wastewater hazards, risk analysis for worker health and safety, risk mitigation planning and personal protection.

Attendees praised the course structure and instructors: "I thought the handouts and real-world examples were great. I enjoyed seeing the soil samples, sampling equipment and glow germ. The courses were well structured and interactive." Others noted the "depth of knowledge by both instructors" and described both instructors as "very capable and engaging." OOWA staff received positive mention: "Event ran well, staff (Kelly) was more in the background and did a fine job welcoming attendees." When asked if they would recommend this type of course, attendees responded, "Yes, particularly anyone new to the industry."

OOWA thanks Anne Egan and Rick Esselment for their instruction and all participants for their engagement. We remain committed to offering practical training that strengthens technical skills and workplace safety in the onsite wastewater industry.

“ Participants Thoughts on The Course:

"I thought the handouts and real-world examples were great. I enjoyed seeing the soil samples, sampling equipment and glow germ. The courses were well structured and interactive."

*Would you recommend this course?
"Yes, particularly anyone new to the industry."*

“ Participants Thoughts on The Staff:

A "depth of knowledge by both instructors"

"...staff (Kelly) was more in the background and did a fine job welcoming attendees."

MEMBER Profile Questionnaire

Ella Bird

Birds Septic Designs & Consults

Name of Organization: Birds Septic Designs & Consults

Owners: Ella Bird

Services/Mandate: On-site sewage system design & sewage system consultations. Assist with other application processes such as performance level reviews or other sewage system related applications with the principal authority in the area of jurisdiction.

Service Area: Nipissing, East & West Parry Sound, Archipelago, Muskokas & Beyond.

Number of Years in Role: 7 months

What got you started in the onsite wastewater industry?

I worked for 10 years as a regulator in Part 8 of the Ontario Building Code with the North Bay-Mattawa Conservation Authority. Many of those years were as an inspector but I also had the opportunity to work as a DCBO for my last few years and as acting manager of the sewage system program there for 10 months.

What is one reason/secret for your success?

I believe in staying up to date on many of the innovative technologies whether they are BMEC or CAN-BNQ 3680 approved systems. I also think it is very important to stay educated and knowledgeable in order to be successful in any role in the industry.

What was the most challenging onsite job you worked on or participated in?

There have been a few... The most difficult ones were alternative solutions proposals. These are difficult as they are were few and far between and only typically used as a last resort. Reviewing the objectives and functional statements of the code and cross referencing them with acceptable solutions and the different proposals from different contractors / designers / engineers could prove to be time consuming, but ultimately were learning experiences each time and something I will hopefully be able to fall back on in my new role if necessary.

If you could change one thing about the onsite/ decentralized industry, what would it be?

As a new third party designer, I am already noting that all municipalities do not have the same septic permit applications. As I only worked in 1 area on the regulator side for 10 years, I can now sympathize with installers and designers whom are needing to provide different documents and on site inspection requirements for different municipalities and governing bodies.

Where do you see the onsite industry going?

With smaller lots and larger dwellings / multi generational properties being developed, I believe the industry is heading towards more level 4 treatment units being required in the future, as well as a strong need for experts in the design field.

Leaders in factory engineered systems.



EPS

Engineered Pump Systems

Grinder Systems

Solids-Handling Systems

Effluent Systems

Simplex • Duplex

Triplex • Quadplex

Order a Liberty EPS and you'll get the assurance of the complete system arriving to the job-site with factory matched components – pump, panel, basin, internal piping, guide rails, floats - all from one source. With an almost unlimited number of basin and panel options - we can customize a system for your specific application.

Need it fast?

Specify a pre-designed system from Liberty! Pre-designed systems are available and ready to ship in 24 hours. Consult factory for more information on our pre-designed packages.

X-Series™

Explosion-proof models available for hazardous locations!

Liberty Pumps®

A Family and Employee Owned Company

800-543-2550

www.LibertyPumps.com

Copyright © Liberty Pumps, Inc. 2025 All rights reserved.

ENHANCE YOUR KNOWLEDGE

BUILDING CODE

Top-tier Training and Certification

On-Site Sewage: This course deals with the fundamental requirements related to the administration and enforcement of the Ontario Building Code as related to private on-site Sewage Systems with design capacity less than 10,000 Litres per day.

Legal Process for Building Officials & Designers: An introduction to the legal process for all building officials, persons authorized by RCAs and individuals considering entering the world of Building Code administration in Ontario.

Building Officials & the Law: This course provides Building Officials with an overview of their legal responsibilities and professional conduct requirements. Topics include the Occupational Health and Safety Act, lawful entry procedures, evidence handling, communication skills, and compliance strategies under the Building Code Act. Participants will also learn about privacy obligations, court preparation, and the Building Inspector's role as a witness.

Inspectors' Technique Suite (ITS) - On-Site Septic Systems:

This course trains participants on the techniques and processes to complete on-site sewage system inspections under the building code.



Register Today!
www.oboa.on.ca/training



New Inspectors' Technique Suite: On-Site Septic Systems

The Ontario Building Officials Association (OBOA) is proud to introduce a new addition to its Inspectors' Technique Suite: On-Site Septic Systems. This video-based, self-directed learning module is designed to help building professionals and inspectors strengthen their skills and confidence when performing on-site sewage system inspections under the Building Code.

Sewage system inspections require focus, consistency, and attention to detail. This module walks participants through real installations, highlighting key checkpoints and sharing practical tips that help inspectors stay thorough and professional in the field.

In this course, participants will learn to:

- Review on-site sewage system installations with confidence
- Apply practical techniques to handle varying site conditions
- Identify where issues are most likely to occur
- Apply best practices for reporting and follow-up

Whether you're new to septic inspections or looking to refine your technique, this new training module provides the tools and insights you need to perform effective, consistent inspections across Ontario.

To learn more, visit
<https://www.oboa.on.ca/training/oboa-its>

Looking Back At Walkerton

[See original article](#)

By Carolyn Camilleri

This article first appeared online on Page 12 of Ground Water Canada in Fall 2025. It is reprinted by permission.

May 2025 marked the 25th anniversary of the Walkerton water crisis. Safe to say, anyone connected to the water industry in Canada has at least a basic knowledge of what happened in Walkerton, how it happened, and the tragedy it caused. While the lessons learned and the lives lost and affected should never be forgotten, the community of Walkerton is mostly ready to move on from it.

The Town of Walkerton is located on the Saugeen River in the Municipality of Brockton in Bruce County, Ontario. This past March and April, the municipal council discussed and debated how to mark 25 years since the Walkerton water crisis. Mayor Chris Peabody says the debate on council reflects the divisions in the town.

"Out of the seven, two councillors wanted really to do a large scale memorial for the 25th and the remaining five, including myself, we're sensing that the townspeople are weary of this and would like to move on," says Peabody, adding that for some townspeople, these anniversaries can be emotionally triggering. "There are divisions on council and divisions in the town, but I think the percentage of the division is accurately reflected in the council vote of five to two against."

What is well worth highlighting here is the resilience of the community. Peabody, who has lived there for more than 30 years, was first elected as a councillor in 2000 and has been mayor of the municipality since 2000. He says the town did not turn on itself through the conflict.

"When you've got relationships in a small town where everybody knows each other, it goes a long way when there is conflict that things don't totally break down into strife," he says. "I think that's part of the resilience of a small town that you couldn't get in a bigger community."

Economically, Walkerton held steady in the years immediately following the crisis.

"We didn't decline. The main street remained vibrant. But just in terms of population and growth, we did move sideways in the decade after, and it wasn't really until 2018 that things started to pick up here," says Peabody. "So as mayor, I'm reluctant to bring back those times and memories, and when we're trying to, especially during that post-COVID boom, we were really trying to catch the wave, and we did. We had some really good growth."

While Peabody says there are some townspeople who will probably never drink tap water again, the municipality actively engages the community in decisions around Walkerton's water, which has been managed by Veolia Water Technologies since 2005.

"We've renewed their contract because we're so happy with the work that the Veolia manager does on our water system," he says.



May marked the 25th anniversary of the Walkerton, Ont. water tragedy. Although the community continues to heal, it is pressing forward.

Continued from previous page

Personally, Peabody says he has no apprehension drinking tap water anywhere in North America.

“I know how well it’s regulated and tested,” he says. Peabody has studied water systems and considers rigorous education in drinking water a responsibility of governance. He also has a deep understanding of the Clean Water Act and Source Water Protection in Ontario, which he says are good pieces of legislation.

“One thing I have been impressed by, that’s stood the test of time, neither subsequent governments have changed those pieces of legislation. They’ve stayed there,” he says. “You look at the Endangered Species Act, there was some changes with that just recently with Bill 5, but these two pieces of water legislation were untouched. I’m very vigilant on those two pieces of legislation, and they haven’t been touched yet. I certainly hope they won’t be.”

As for the community of Walkerton itself, they stuck together through a time of incredible strain and sorrow – and they are also moving forward together. “We have bounced back,” says Peabody. “We were one of the few small towns in Canada to get the housing accelerator grant from the federal government – \$3.4 million to incentivize builders to build affordable housing... We’re going to use that money to make sure we get some good growth. You never want too much growth, but you do need enough to keep your hospital and your high schools open. That’s really my goal

While the water crisis itself has become part of the history of the Walkerton community, the lessons learned have forever changed how we monitor and maintain water supplies. In addition to new legislation and policies on water protection and safety, another very positive result was the creation of the Walkerton Clean Water Centre (WCWC), an agency of the Government of Ontario.

“The Walkerton Clean Water Centre was created as a direct response to the Walkerton tragedy, and that history continues to shape and inspire our work every day,” says Brian Bates, WCWC’s CEO. “The tragedy fuels the passion of our team and is embedded in our vision: Clean safe water for everyone in Ontario. It is not just a statement on our website – it’s a commitment to ensuring that the lessons of Walkerton are carried forward to every generation of drinking water professionals.”

Twenty-five years later, Bates says they honour the memory of those affected by committing themselves to ensuring it never happens again. “Our training, piloting, and support services are grounded in that commitment,” he says.

WCWC works closely with drinking water operators, including those in small, rural, and Indigenous communities, to provide the practical skills and knowledge needed to produce safe drinking water to protect public health.

“The Clean Water Act is directly tied to the recommendations from the Walkerton Inquiry, led by Justice Dennis O’Connor,” says Bates. “The most significant change was a shift from reaction to prevention. The Clean Water Act contains a framework for source water protection which requires municipalities to identify risks and develop plans to reduce or eliminate those risks.”

He adds that it also makes drinking water protection a shared responsibility and promotes collaboration among municipalities, conservation authorities, and the province’s Ministry of Environment, Conservation, and Parks.

Another key concept that came out of the Walkerton tragedy and was recommended in the Walkerton Inquiry is the “multi-barrier approach” to drinking water safety, which Bates says has become central to how drinking water is managed in Ontario today.

“The premise is that no single step can guarantee safe water on its own, so we put multiple barriers in place,” he says.

These barriers include source water protection, proper treatment, secure distribution, regular testing and monitoring, and effective response – all of which rely on well-trained operators. If one barrier fails, the others are there to prevent contamination from reaching the tap.

“The Clean Water Act focused heavily on strengthening the first barrier: protecting our sources of drinking water before contamination ever happens,” says Bates. “Well-trained operators and clear oversight are critical aspects identified by Justice Dennis O’Connor’s recommendations. In WCWC’s training, we emphasize the multi-barrier approach, helping operators understand how each barrier plays a critical role in protecting public health.”

The training programs at WCWC are designed for drinking water operators, water systems owners, and anyone involved in managing drinking water systems that use groundwater and surface water, including operators that use both ground and surface water.

“We work with operators from large to small, urban to rural communities, but have a number of courses that have a particular focus on small systems, including those found



Walkerton, Ont. is bouncing back from the water crisis it experienced 25 years ago.

in many Indigenous communities, where resources can be more limited and challenges more complex.”

Courses are available on everything from disinfection and microbiological sampling to troubleshooting distribution systems, managing treatment chemicals, and understanding emerging risks.

“The challenges operators face are varied and include things like aging infrastructure, limited staffing, tight budgets, and the impacts of climate change on source water quality,” says Bates. “WCWC’s role is to make sure operators and system owners have the practical knowledge, skills, and confidence to keep their communities’ drinking water safe, no matter the size or complexity of the system they operate or the source of their drinking water.”

In addition to providing training, WCWC conducts research. One of the key areas of focus at WCWC now is per- and polyfluoroalkyl substances (PFAS), often referred to as “forever chemicals.”

“These substances are extremely persistent in the environment and have been detected in some groundwater sources across North America,” says Bates. “While Ontario has not yet established regulatory limits for PFAS in drinking water, Health Canada released an objective document for PFAS in 2024 and is currently reassessing the drinking water guideline. Many in the groundwater industry are watching this issue closely.”

WCWC is conducting bench-scale research on PFAS-treatment technologies to better understand which approaches are most effective and practical for small and remote systems.

“We are also monitoring developments in regulations, treatment methods, and laboratory analysis so we can prepare Ontario’s operators, owners, and decision makers for what’s coming,” says Bates.

While PFAS chemicals are not yet formally regulated under Ontario’s Drinking Water Quality Standards, interim

guidelines are in place and new federal objectives are driving further evaluation.

“WCWC’s goal is to ensure that when enforceable standards are introduced, our clients won’t be starting from scratch,” says Bates. “We want the groundwater community to know that WCWC is here to support them with practical training, pilot research, and information-sharing as PFAS continues to emerge as a priority issue.”

More Work Ahead

While many Canadians take clean drinking water for granted, it isn’t the case everywhere. Some rural, remote, and Indigenous communities continue to face significant challenges in ensuring access to clean, safe drinking water.

“To my knowledge, there are over 30 long-term drinking water advisories in effect in Indigenous communities across Canada,” says Bates. “While I can’t speak to the specifics behind each advisory, many are linked to factors like aging infrastructure, limited staffing, complex source water characteristics, challenges in accessing specialized training or technical support, or operational challenges.”

To support communities facing these challenges, WCWC is working hard to make training even more accessible with virtual training, eLearning, and hosting face-to-face in more remote locations.

“We’ve recently completed Voice-of Customer research with a number of Indigenous communities in Ontario to better understand their needs in terms of training and services so that we can tailor our programs and services to be more relevant, practical, and responsive,” he says. Bates adds that it isn’t all on the operators.

“System owners and decision-makers play an important role in drinking water safety as well,” he says. “It’s a shared responsibility, and WCWC offers training specifically designed to support those leadership roles as well.”

Bates says that groundwater professionals also play an essential role in protecting public health, often with limited resources and little public attention. He concludes his comments with a message for the groundwater community. “As we navigate challenges like aging infrastructure, climate change, and emerging contaminants such as PFAS, your expertise and vigilance are more important than ever,” he says. “WCWC is committed to supporting you in your efforts. Whether through training, pilot scale research, or information sharing, WCWC is here to help you stay ahead of evolving risks and regulations.”

Continued from previous page

A Note From OOWA

The Walkerton E. coli outbreak in 2000 highlighted the risks associated with contaminated drinking water and spurred significant changes in Ontario's drinking water and wastewater management. In the Walkerton Inquiry Report, Justice O'Connor called for a multiple-barrier water management approach to prevent a similar water contamination event from occurring again.

As a result Ontario Regulation 315/10 as made on July 13, 2010 – an amendment to the Ontario Building Code that established mandatory on-site sewage system maintenance inspection programs in “vulnerable areas” and governs discretionary programs in other areas.

These regulations support the Clean Water Act, 2006 by requiring inspections for septic systems located within a specified distance (e.g., 100 meters) of municipal wells or in high-risk zones to protect drinking water sources.

For more information on the Walkerton Tragedy visit the Walkerton Clean Water Centre Youtube page.

<https://www.youtube.com/watch?v=tzOoLm2wmHs>



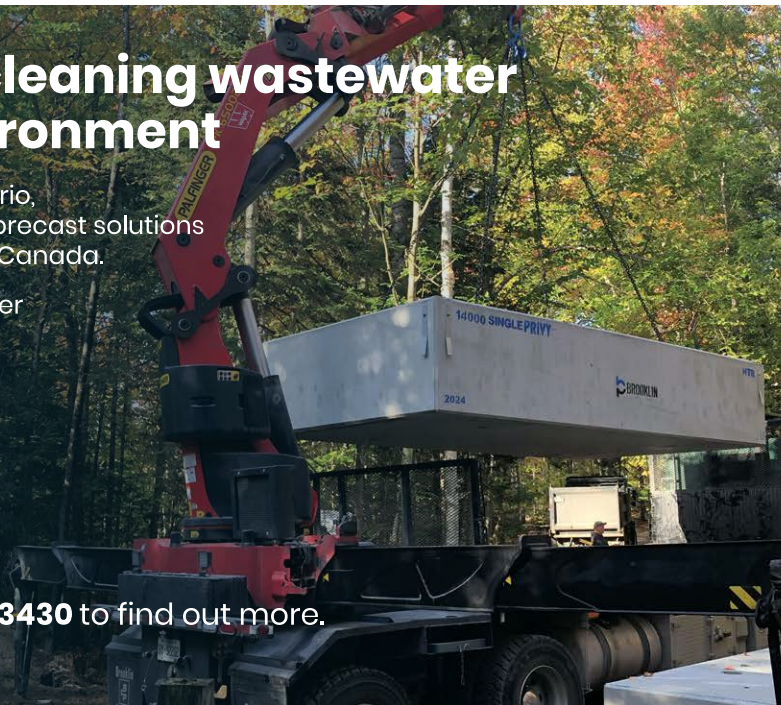
Precast concrete solutions engineered for high efficiency and performance

Concrete solutions for cleaning wastewater and protecting the environment

The largest manufacturer of septic tanks in Ontario, Brooklin Concrete Products provides innovative precast solutions for wastewater and water management across Canada.

- Septic Tanks
- Pump Tanks
- Holding Tanks
- Privy Tanks
- Plastic Septic Tanks
- Tertiary Septic Systems
- Fire Protection Water Storage Systems
- Septic Accessories
- Oil Interceptors
- Well Tiles

Visit **Brooklin.com** or call us at **1.800.655.3430** to find out more.



MEMBER Profile Questionnaire

Jason Simpson

Township of Norwich

Name of Organization: Township of Norwich

Owners: Council to the Township of Norwich

Services/Mandate: Local government services including enforcement of the Ontario Building Code and applicable law (e.g. issuance of building permits and inspections of on-site sewage systems)

Service Area: Township of Norwich in southwestern Ontario

Number of Years in Role: 0.5

What got you started in the onsite wastewater industry?

I began my career as a building official over 23 years ago. Review of onsite wastewater system designs and inspection of these systems is a function of building officials under the Building Code Act and the Ontario Building Code.

What is one reason/secret for your success?

Enjoyment in helping development projects successfully achieve compliance with the Ontario Building Code while understanding that community development and construction is a business that affects everyone, helps drive the economy and can have an impact on the users and community for years.

What was the most challenging onsite job you worked on or participated in?

Identifying a dwelling unit that was discharging effluent directly into the ground without treatment and was contaminating local water sources.

Additional Flow – Explanation of comma’s, AND, and OR

By: Eric Kohlsmith

The Ontario Building Code uses punctuation and conjunctions like commas, “and”, and “or” to define the logical structure of the requirements. As an instructor for the Ontario Rural Wastewater Centre, the most debated list in the Part 8 prep course is found in Table 8.2.1.3.A Residential Occupancy:

f) Additional flow for

i) each bedroom over 5,

ii) A) each 10 m² (or part of it) over 200 m² up to 400 m²,
B) each 10 m² (or part of it) over 400 m² up to 600 m²,
and C) each 10 m² (or part of it) over 600 m², **or**
iii) each fixture unit over 20 fixture units

Commas are used as separators between items for clarity and readability. Breaking the list down into individual parts, I hope to provide some clarity to the table – remember I’m a Sewage System inspector, not an English teacher.

Part 1: “i) each bedroom over 5,”

The comma after “i)” **acts as neutral separator between other items** (ii and iii) in the list. It does not imply a specific logical connection like “and” or “or”; it simply separates the list items.

Part 2: “ii)

A) each 10 m² (or part of it) over 200 m² up to 400 m²,
B) each 10 m² (or part of it) over 400 m² up to 600 m²,
and C) each 10 m² (or part of it) over 600 m², **or**”

The “and” at the end of item B) indicates that items A), B), and C) are cumulative. If the floor area exceeds 600 m², the additional flow must be calculated for each range: (A) 200–400 m², (B) 400–600 m², **and** (C) over 600 m².

Part 3: “C) each 10 m² (or part of it) over 600 m², **or**
iii) each fixture unit over 20 fixture units”

The “or” at the end of item C) is important. It connects item C) with item iii) fixture units, indicating that the calculation method is based on either floor area (items A, B, and C) or fixture units over 20 (item iii). Additionally, since item i) is separated by a comma and comes before items ii) and iii), it is interpreted that item i) is also part of the “or” structure.

Therefore, the list outlines three alternative criteria for calculating additional design flow based on bedrooms, floor area (A, B, **and** C), **or** fixture units.

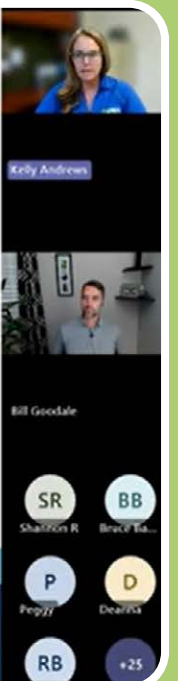


About the Author

Eric has been a Part 8 Building Official for the Rideau Valley Conservation Authority since 2008 working in Tay Valley Township with their program expanding to an additional 5 municipalities in eastern Ontario in 2022. Over the last 17 years he has administered sewage system re-inspections programs in up to 5 local municipalities. Eric is an instructor with both OOWA and the Ontario Rural Wastewater Centre delivering courses related to onsite sewage systems. For the last several years Eric has been a member of the OOWA Board of Directors.

Our Members

Our members are at the front lines of rural development, supporting onsite systems as sustainable, affordable and permanent wastewater servicing options.



Septic Awareness Week Recap

Septic Awareness Week 2025 was a resounding success, marked by strong engagement, regional collaboration, and a shared commitment to public education. Across Ontario, we were thrilled to see a wave of media releases from municipalities and organizations helping to amplify the importance of proper septic system care.

As part of our outreach, OOWA hosted a live webinar featuring Executive Director, Kelly Andrews, and President, Bill Goodale of Tatham Engineering. With 89 registrations, the session offered valuable insights into system maintenance, homeowner responsibilities, and the broader impact of septic health on our communities. The conversation was thoughtful, informative, and well-received by attendees.

OOWA was also proud to support the Drinking Water Wise Webinar Series, hosted by the Best Practices Ontario Working Group. This collaborative effort brought together five Source Protection Regions—Quinte, Cataraqui, Mississippi-Rideau, Niagara Peninsula, and Trent Conservation Coalition—to deliver a session titled “Septic Systems 102.” The webinar featured OOWA’s Executive Director, Kelly Andrews, alongside Board Member and ESSE Canada Project Manager, Mike Gibbs. Their contributions helped ground the presentation in real-world experience and emphasized the vital link between septic system health and drinking water safety.

Scan the QR code to watch the full recording.

Throughout the week, we also shared homeowner tips across our social media channels—covering everything from seasonal maintenance reminders to myth busters. These posts sparked meaningful dialogue and helped equip residents with the knowledge they need to care for their systems year-round.

We’re proud of the momentum generated during Septic Awareness Week and grateful to everyone who helped spread the word. Whether through media coverage, webinar participation, or social media engagement, your involvement helped make this week a powerful reminder of what we can achieve together.

Thank you for being part of the conversation—and for helping us drive awareness, one household at a time.

Watch Here



OOWA at the 2025 NOWRA Conference: Collaboration, Innovation, and Connection

By: Kelly Andrews

The 2025 National Onsite Wastewater Recycling Association (NOWRA) Conference was held at the Kalahari Resort in Sandusky, Ohio, from October 19–22, in partnership with the Ohio Onsite Wastewater Association (OOWA). Many state affiliate associations joined the event including Jason Birdsong, President of the Oklahoma Onsite Wastewater Association (also OOWA). Our President from the Ontario Onsite Wastewater Association, Bill Goodale, did not miss the opportunity to build new relationships.

Throughout the conference, OOWA members were well represented among manufacturers, suppliers, board members, and other industry professionals. Much like our own annual conference, NOWRA's event brought together engaged experts committed to advancing the onsite wastewater industry. The strong Ontario presence highlighted the value of building connections and exchanging ideas across North America.



Pictured: The three OOWA Presidents (left to right) — Jason Birdsong (Oklahoma), Zak Sherman (Ohio), and Bill Goodale (Ontario).

This year's conference theme, "Clean Water Strategies at the Heart of it All," resonated deeply with us Ontarians, especially as we reflect on the 25th anniversary of the Walkerton tragedy — a pivotal event that reshaped drinking water and wastewater management across our province.

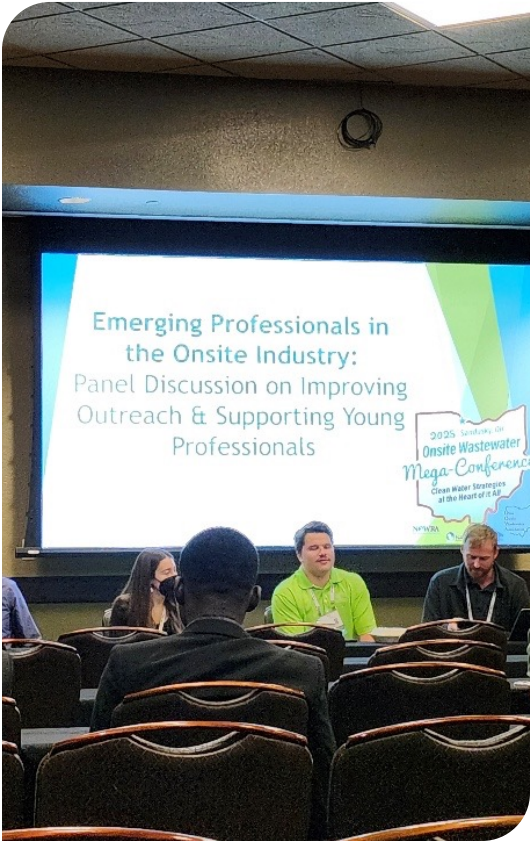
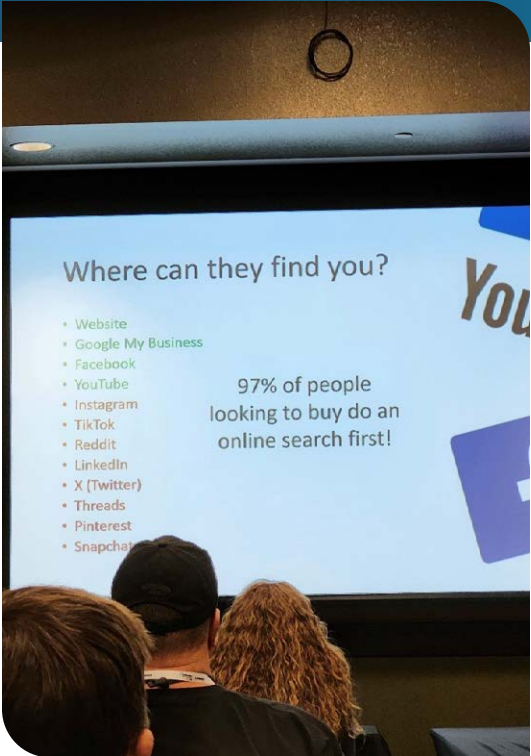
A notable feature of this year's event was the Service Provider Training Stream, which ran throughout Monday and Tuesday. This new education initiative from NOWRA offered both general and manufacturer-specific instruction focused on system operation, maintenance, and troubleshooting for a wide range of onsite wastewater treatment technologies.

The broader agenda included diverse technical and professional development tracks such as:

- Planning & Education
- Installation & Safety
- Operation & Maintenance
- Septage Acceptance
- Future of Onsite Systems
- AI & Technology
- Innovative Technology

Over two days of learning and discussion, several clear themes emerged:

1. The aging onsite and decentralized infrastructure presents a growing challenge across North America.
2. Septage acceptance remains a widespread concern — one that many regions will soon face.
3. Advances in science, technology, and research are creating opportunities that can benefit every professional in the field, regardless of location or specialization.



Recently NOWRA introduced an Emerging Professionals Committee, focused on engaging and supporting the next generation of onsite wastewater professionals. I had the opportunity to attend their panel discussion and subsequent meeting, gaining valuable insight into NOWRA's efforts to build a sustainable future workforce. I also shared updates on OOWA's initiatives to raise awareness of career opportunities within our sector. As Missouri installer Nick Dyke aptly stated, "We need to get excited about the onsite industry in order to get young people involved."

Another highlight was the Nationwide Analysis of Septage and Portable Sanitation Disposal Challenges, conducted by the National Association of Wastewater Technicians (NAWT) in collaboration with key stakeholders. The study revealed that many treatment facilities now restrict the daily volume of waste accepted from septage haulers, and that infrastructure for managing onsite and portable wastewater has not kept pace with industry growth.

For those interested, the full report is available here: NAWT White Paper on Septage Disposal Challenges

Artificial Intelligence was another recurring theme throughout the conference. Scott Andreasen of Excavation Marketing Pros demonstrated how AI tools can enhance lead generation, while Nelson da Luz from the University of Massachusetts Amherst presented on using machine learning to build a national inventory of septic systems.

Meanwhile, Dawn Rohrs of Cyclone Septics discussed effective strategies for strengthening a business's online presence through social media and SEO, and Jean Bourgeois from Omega LWS shared promising research on a new onsite processing technology designed to improve both efficiency and environmental outcomes.

Despite a few cancellations due to the current U.S. political climate, the conference provided ample opportunities for learning, networking, and inspiration. We seized the moment to recruit new speakers and exhibitors for upcoming conferences — even securing a Keynote Speaker for 2027.

Representing OOWA at NOWRA 2025 was a privilege and a responsibility that Bill and I took seriously. We left with fresh ideas, valuable contacts, and renewed motivation to bring new initiatives and insights back to our members.



Photo Credit: ESSE Canada

The Pros and Cons of Refilling a Septic Tank with Water After Pumping

Septic tank maintenance is critical for ensuring the longevity and efficiency of a septic system. One debated practice is refilling a septic tank with water after it has been pumped out to remove accumulated solids. This article explores the advantages and disadvantages of this practice, considering its impact on system functionality, effluent screen filter performance, and tank stability in high groundwater conditions.

Advantages of Refilling a Septic Tank with Water

1. Restoration of Operational Liquid Levels

Refilling the septic tank with water after pumping immediately restores the liquid levels necessary for proper system functionality. Septic tanks rely on a balance of liquid and solids to facilitate the separation of waste. Solids settle at the bottom, while lighter materials, such as grease, float to the top, forming a scum layer. By refilling the tank with water, the system can resume its natural separation process as soon as new sewage enters, ensuring efficient operation without delay.

2. Reduced Risk of Clogging the Effluent Screen Filter

Allowing a septic tank to fill gradually with sewage flush by flush can increase the risk of floating solids, such as grease or lightweight debris, reaching the effluent screen filter. If the liquid level is too low after pumping, these solids may not have sufficient space to float properly and can clog the filter, impeding the flow of effluent to the drain field. Refilling the tank with water establishes the correct liquid level, minimizing the chance of floating solids obstructing the filter and maintaining smooth system performance.

3. Mitigation of Tank Buoyancy Risks

In areas with high groundwater levels, an empty septic tank can become buoyant, potentially causing it to shift or float, which may damage the tank or its connections. Refilling the tank with water immediately after pumping adds weight, anchoring the tank and reducing the risk of buoyancy-related issues. This is particularly beneficial in regions with seasonal high groundwater or during heavy rainfall, where an empty tank is more vulnerable.

Disadvantages of Refilling a Septic Tank with Water

1. Increased Operational Costs

Refilling a septic tank with water, particularly clean water, may incur additional costs. Depending on the water source (e.g., municipal supply or well water), homeowners may face expenses related to water usage. Additionally, coordinating water delivery or using a hose to fill the tank requires time and effort, which may not be practical for all property owners.

2. Potential Disruption of Microbial Activity

Septic tanks rely on a delicate balance of anaerobic bacteria to break down solids. Essentially, septic tanks function as anaerobic digesters, relying on microbial activity to process household wastewater. This biological process involves the decomposition of organic matter in an oxygen-deprived environment, transforming solid waste into more manageable forms such as sludge, liquid effluent, and gases.

In addition to bacteria, enzymes produced by these microbes facilitate the liquefaction of waste. Protozoa, such as ciliates and amoebae, also play a supportive role by consuming harmful bacteria that may enter the system through wastewater, thereby helping to maintain a balanced microbial ecosystem. Microbial communities vary across different parts of the system; for instance, those in the septic tank effluent differ from those in the surrounding soil biomat, where aerobic processes may occur further downstream.

Pumping removes not only solids but also some of the microbial population. Refilling the tank with clean water may temporarily dilute the remaining bacteria, potentially slowing the decomposition process until new sewage reintroduces sufficient microbial activity. This could lead to a brief period of reduced efficiency in waste breakdown.

3. Unnecessary in Low Groundwater Conditions

In areas with low groundwater levels, the risk of tank buoyancy is minimal. In such cases, refilling the tank with water may be an unnecessary step, as the tank will naturally fill with sewage over time without risking structural damage. This makes the practice less critical for some homeowners, depending on local environmental conditions.

To conclude, refilling a septic tank with water after pumping offers several benefits, including the immediate restoration of operational liquid levels, reduced risk of effluent screen filter clogs, and enhanced tank stability in high groundwater conditions. However, it comes with potential drawbacks, such as increased costs, possible disruption of microbial activity, and limited necessity in low groundwater areas. Homeowners should consult with qualified service providers to determine whether this practice is appropriate for their specific system and environmental conditions. Proper maintenance, including regular pumping and inspection, remains essential for ensuring the long-term performance of any septic system whether it is a standard system or an advanced treatment unit.



About the Author

Mike Gibbs has worked for OOWA as their Membership and Outreach Coordinator and now leads ESSE Canada’s Peterborough hub, as well as serves on the Board of Directors for OOWA.

NEW BMEC AUTHORIZATION

#25-07-425

Customer and Installer favorite

- Treatment & dispersal in the same footprint
- Made from 100% recycled materials
- Reduced site impact
- No replacement parts or media needed
- Time-proven for over 40 years
- Less hauled materials

Local distributors : Cromar Environmental, The Septic Store, EST Manitoba



Out and About with OOWA

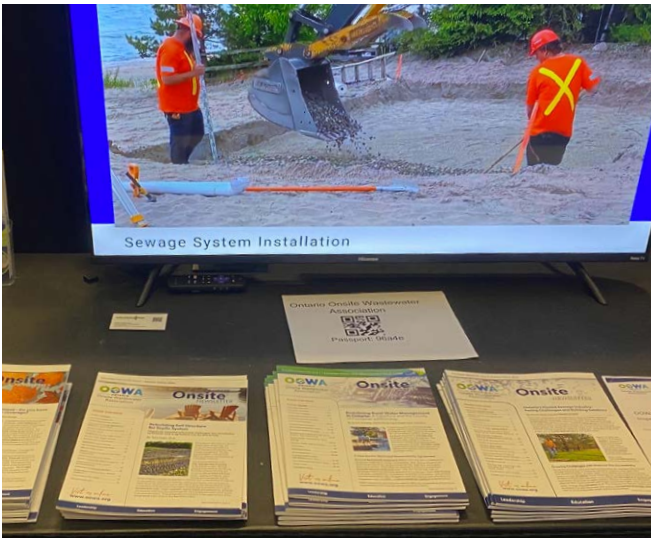
Ontario Building Officials Association AMTS 2025

We were proud to represent the Ontario Onsite Wastewater Association (OOWA) as an exhibitor at the Ontario Building Officials Association's 69th Annual Meeting & Training Sessions (AMTS), held at Deerhurst Resort in Huntsville from September 28 to October 1, 2025. Hosted by the Muskoka Parry Sound Chapter, this year's AMTS brought together over 500 building officials and construction professionals from across Ontario for four days of learning, networking, and industry innovation.

For OOWA, it was a valuable opportunity to connect with current members, introduce our resources to new audiences, and highlight how our work supports not only industry professionals but also homeowners navigating onsite wastewater systems.

We were also pleased to contribute to the educational programming. OOWA President Bill Goodale (Tatham Engineering Ltd.) and Board Member Anne Egan (R.J. Burnside & Associates) delivered a presentation titled "Part 8 Sewage Systems: What Regulators Need to Know?" on October 1st, 2025.

We're grateful to OBOA for hosting such a well-organized and impactful event, and we look forward to continuing the momentum in the months ahead.



OOWA Members – have you recently attended a similar event?

We would love to highlight what our members have been doing to spread the word about the benefits of onsite and decentralized wastewater management.

Send us a brief description of the event, accompanied by a few photos, and we will feature it in a future newsletter!

Send to info@oowa.org

Trivia Tour Kicks Off in Peterborough and London

OOWA's travelling trivia tour is officially underway, and we kicked things off with two fantastic nights of fun, facts, and member connection.

First stop: Peterborough at The Social Pub, where our team, the Thunderboxes, came ready to play. From pop culture curveballs to obscure history, the trivia host kept us guessing all night. He even added a custom question just for us: What has a flange, bowl, valve, chain, float, flapper, and tank? That's right, a toilet.

Second Stop: London, where the competition was fierce and the laughs were plenty. We didn't take home the trophy, but we proudly landed second-last (which is still not last). And yes—we were in first place for a round. No photo proof, but we're sticking to our story.

It was a joy to see so many OOWA members and partners come together for a well-earned break from the usual wastewater talk. We're already planning what's next.

Next Stop: Barrie Date: November 19 Time: 6:30 PM
Location: The Bull and Barrel

More stops are coming soon—stay tuned and join the fun when we roll into your town.





Performance and efficiency

The 12E Series Effluent Pump

Features & Benefits

- 1/2 hp Permanent Split Capacitor (PSC) motor
- Heavy-duty epoxy-coated cast iron housing
- Designed for continuous duty
- 2" FNPT discharge (51 mm)
- Piggyback automatic switch option
- 3/4" solids handling

Available at



Near North Supply

PLUMBING | GROUNDWATER
WASTEWATER | WATER CONDITIONING

191 Big Bay Point Rd, Barrie • 705-721-9112 • nearnorthsupply.com



LittleGIANT.



Building the Homeowner Package: Septic Know-How Made Simple

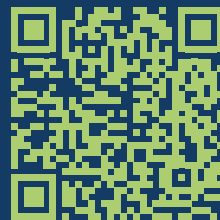
The Homeowner Package Task Group is developing a practical, easy-to-understand resource to help Ontario residents take ownership of their onsite wastewater systems with confidence. The goal is to provide homeowners with essential information—what they must know about their septic system, how to care for it, and where to turn when things go wrong.

The package will include:

- “Myths vs. Truths” about septic systems
- Tips on locating your system and understanding its design
- FAQs with straightforward answers
- A clear list of what can and cannot go down the toilet
- QR codes linking to additional resources
- Guidance for renovations, repairs, and real estate transactions

We’re also working on a user-friendly landing page that helps homeowners identify their situation—whether they’re building, buying, renovating, or troubleshooting—and directs them to the most relevant information. The final materials will be printable, shareable, and accessible through installers, municipalities, and industry partners.

Get It Here



We already have a homeowner handout available as a starting point, which consolidates our most requested resources and webpages. This can be printed for display or distribution, and is available on our website. The full Homeowner Package will build on this foundation and is scheduled for release in 2026.

Septic System Resources for Homeowners



Video Resources



Septic System Do's and Don'ts

Tips and tricks for keeping an onsite sewage system healthy and functioning for its proper lifespan.



Septics 101

Learn the basics of what an onsite sewage system is, how it works, and how to maintain its integrity.



Intro to an Installation

Watch the process of a basic sand filter bed installation in Ontario.



Septic Friendly Toilet Paper

Not all toilet papers are made the same - learn which are best for your septic and why.



Find a Professional Directory

Locate qualified professionals to design, install, or service your septic system.



Designer vs Installer

Find out what services a designer can provide and what an installer can provide to help decide which qualified professional is for you.



Septic Approval Process

It is critical that Ontario residents understand the septic system approval process before they begin. Learn about what you need, how to file, and how to find a Septic System contractor.



Guide to a Healthy Septic

A simple brochure that details all the fundamentals you need to know to maintain and manage your onsite sewage system.



Buying & Selling a Property

Learn about what you need to know when buying a property with a Septic System and what you need to know when selling.



Septic Tank Additives

Ever wondered what septic tank additives are and what they do? OOWA explains what you need to know.



oowa.org

855-905-OOWA

info@oowa.org

Follow on Socials for weekly
“Homeowner Hints”





OOWA's Inaugural Golf Tournament Recap

On September 19, 2025, the Ontario Onsite Wastewater Association hosted its first-ever Golf Tournament at Harbourview Golf and Country Club in Gilford. With 62 attendees, clear skies, and a shared spirit of generosity, the day was a celebration of community, connection, and purpose. The event raised over \$6,000 in support of our Scholarship Program, helping students across the region pursue their educational goals.

Golfers arrived ready to enjoy the course and connect with fellow players, sponsors, and supporters. The putting contest sparked plenty of laughs, with some struggling to score but all enjoying the challenge. The OOWA Golf Ball Challenge added a playful twist—some balls disappeared into the fairway abyss while others returned with dents and scratches, each one inspected and celebrated like a badge of honour.

We extend our sincere thanks to the staff at Harbourview Golf and Country Club for their hospitality and support throughout the day. Their efforts helped create a welcoming atmosphere and ensured the event ran smoothly from start to finish. We're also deeply grateful to our event team—Kelly Andrews and Tiffany Daskewich—for their hands-on support, and to Krista Duke for her leadership and attention to detail. Every aspect of the day reflected their dedication and care.

The success of this event would not have been possible without the generous support of our sponsors. We are proud to recognize Newmarket Precast as our Ace Sponsor, Makeway Environmental as our Beverage Cart Sponsor, Infiltrator as our Cart Sponsor, and Rob Botrie Corporation as our Putting Contest Sponsor. Hole sponsors included ESSE Canada, Waterloo Biofilter, Morden Sand & Gravel, Rob Botrie Corporation, PolyLok, Pentair, and Canadian Sanitation. Prize sponsors included Canadian Sanitation, Metropolitan Pump, Park'N Fly, Pentair, Clearford, Infiltrator, and Safe Sewage Systems Consulting Inc.

This tournament was more than a day on the green—it was a meaningful step toward driving change. Every swing, every sponsored hole, and every shared moment contributed to a brighter future for students in our community. We're already looking forward to next year's tournament and hope to see even more of you there. Thank you for being part of something truly special.



OOWA Named Finalist in Micro Business Category – Excellence Awards

We're excited to share that OOWA was recognized as a finalist in the Micro Business category at this year's Peterborough & Kawartha Chamber of Commerce Excellence Awards. This recognition reflects the strength of our community and the impact we're making together across Ontario's onsite and decentralized wastewater industry.

As a not-for-profit, member-driven association dedicated to advancing the industry throughout Ontario, OOWA exists because of you—our members. Whether you're an installer, designer, engineer, regulator, manufacturer, student, or municipal official, your expertise and commitment to protecting Ontario's water resources and public health are what drive our mission forward.

Over the past year, we've grown in meaningful ways. We've expanded our reach, strengthened our team, and deepened our presence at industry events. Through technical training, regulatory updates, and outreach initiatives that promote best practices and environmental responsibility, we continue to support your work and elevate the sector.

Being named a finalist is a reflection of the momentum we're building together. **Thank you for being part of this journey—and for helping make OOWA a trusted hub for connection, education, and advocacy.**



SEPTIC SYSTEMS

TERTIARY SYSTEMS

FIRE/WATER STORAGE

STORAGE UNITS

RETAINING WALLS



Now Serving Huntsville, North Bay, Halliburton and other surrounding areas out of our Huntsville Depot

Uxbridge | Huntsville
 ☎ 905-852-6111 | ☎ 705-344-6111

📍 20 Victoria Street N. P.O Box 1179, Uxbridge, ON L-P 1N4
 ✉ info@newmarketprecast.com 🌐 www.newmarketprecast.com

5 Winter Septic System Maintenance Tips



Pump the septic tank.

If necessary the tank should be pumped prior to the winter season to eliminate accumulated solids.



Inspect vegetation on new systems.

Fall installations may lack insulation from vegetation, increasing freeze risk. Add mulch or dry soil to protect the system.



Check the system before winter hits.

Inspect the tank before freeze-thaw cycles to catch and fix any cracks or issues. Check the drainfield for surfacing effluent, wet spots, or spongy soil.



Winterize vacation home plumbing.

Septic systems need regular use to avoid freezing. For seasonal homes, pump the tank before the first frost and winterize the pipes.



Keep snow and structures off the drainfield.

Snow insulates, but compacted snow doesn't. Avoid driving over the drainfield or placing structures on it—even in winter.

There's never a good time for a septic system issue—especially during the **cold winter months**. These practical tips can help you and your customers keep septic systems running smoothly all season long.