



THE LITTLE DIGGER

A bi-monthly publication

Set for October 21–24, 2018—

2018 Onsite Wastewater Mega-Conference Visits Minnesota

The Onsite Wastewater Event of the Year makes a stop in Minneapolis this October, as NOWRA teams up with its local partner MOWA (Minnesota Onsite Wastewater Association) and national partners SORA (State Onsite Regulators Alliance), and NAWT (National Association of Wastewater Technicians) for the 4th Onsite Wastewater Mega-Conference.

The Mega-Conference will be held at the DoubleTree by Hilton in Bloomington October 21st through 24th. To register for the event, go to www.mowa-mn.com or www.nowra.org.

The Mega-Conference is the largest national conference focusing directly on decentralized and onsite wastewater treatment. It brings together industry professionals from all over the country in one place to learn and share information in ways that not only benefit those in attendance but the industry as a whole.

MOWA members should be pleased to know that the Mega-Conference is priced the same as the MOWA Annual Conference, even though it offers them a wider range of educational options.

If your focus is entirely on Minnesota, you will find lots of state-related educational sessions, including a keynote address by either the head of MPCA or Governor Dayton.

NOWRA Mega-Conference

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Once again, MOWA Summer Seminar is Outstanding in its Field!



2018 NOWRA Mega-Conference Low-Down!

NOWRA Mega-onference

Continued from Page 1

(The Governor had not made a decision about speaking at press time.) Three field trips which highlight much of the innovative activities taking place in Minnesota are planned.

While the Minnesota-focused content is great, MOWA members will have more than 60 concurrent education sessions from which to choose, in topics ranging from technological advances to policy, management and regulation.

Should you attend this conference? Absolutely yes if you believe the value you'll get is greater than your investment of time and money to attend. And while everyone defines value in their own way, consider some of the following benefits of attendance:

- **Earn CEUs to meet your licensing requirements** – We anticipate that all or most of these sessions will be approved



for continuing education credit by the state.

- **Get training for you or your employees** – In addition to a NAWT O&M track, lots of good training can also be found in other concurrent sessions and field trips
- **Learn about new products/services you can use** – The Mega-Conference Expo brings

dozens of national manufacturers offering innovative technologies and services

- **Generate ideas to make you and your organization grow** – Whether it's through insights gained in the classroom or ideas exchanged with colleagues in a social setting or hallway conversation, chances are you'll get a handful of ideas you can begin to implement when you get home.

NOWRA Mega-Conference, Continued on Page 7

IN 2018, ALL ROADS LEAD TO MINNEAPOLIS!

REGISTER NOW!

(Go to Page 12 for registration form)

2018 ONSITE WASTEWATER MEGA-CONFERENCE
OCTOBER 21-24, 2018
Doubletree by Hilton Bloomington – Minneapolis South
Bloomington, MN

A partnership between NOWRA and MOWA (Minnesota Onsite Wastewater Association)



From MOWA's Executive Director

By Pat Martyn, MOWA Executive Director

Thank you to Melissa Besser and Septic Check!

Melissa Besser of Septic Check hosted the 2018 Summer Seminar in late June. Many, many thanks to the Bessers for holding this successful event. Many thanks, also, to our always supportive sponsors: Dakota Supply Group - DSG; Eljen Corporation; Fiedler's Your Pumping Specialists, Inc.; FS3, Inc.; Granite Water Works; Infiltrator Water Technologies; Overland Insurance Agency; WEXCO Environmental; Wieser Concrete; and ZieglerCAT. And also thanks to MOWA volunteers Bernie Miller, Stacey Feser, Dean Flygare, Travis Johnson, and Chris LeClair for putting on such a great event. We had good attendance, and everyone went home with a commemorative t-shirt and clipboard. All in all, the event was a great success!

2018 Tony Ruppert Scholarship

We are also pleased to announce the 2018 Tony Ruppert Scholarship. Each year, MOWA gives away up to \$5,000 in scholarship money to MOWA members, or a child, sibling, grandchild, or niece/nephew of a MOWA member. These funds are raised at the auction held at our Convention each winter and are available to high school graduates (as of June 2018) who will be enrolled as full-time students in post-secondary undergraduate education during the 2018-2019 school year. If you or someone in your family qualifies, we strongly encourage you to submit your application and essay by the August 15 deadline. Please see Page 18 of this issue for details.

Mega-Convention is being held in Bloomington, October 21 - 24, 2018!

Our 2018 Convention Committee continues its work, in partnership with NOWRA, on the Fall 2018 Mega-Conference being held October 21 – 24, 2018 at the DoubleTree by Hilton in Bloomington. In the works are exhibits, classes, social events and a full-day day with three field trips to choose from. Details and registration are available in this issue!

You will find in this issue of the MOWA newsletter a listing of the Board Members. You are invited to pick up a phone or email any of them, and let them know how you feel about the organization. President Andy Winkler would appreciate it very much.

We look forward to seeing you soon in Bloomington!

Calendar of Events

MOWA Events

October 21 – 24, 2018 – **NOWRA/MOWA Mega-Conference** – DoubleTree by Hilton, Bloomington, MN (visit www.mowa-mn.com or www.nowra.org for details).

Industry Events

February 20th – 23rd, 2019 - **Water & Wastewater Equipment, Treatment & Transport (WWETT) Show** – Indiana Convention Center (visit <https://www.wettshow.com/> for details).

MOWA

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2018 MOWA Summer Seminar Wrap-Up

MOWA Summer Seminar Delivers Training, Networking and CEUs!

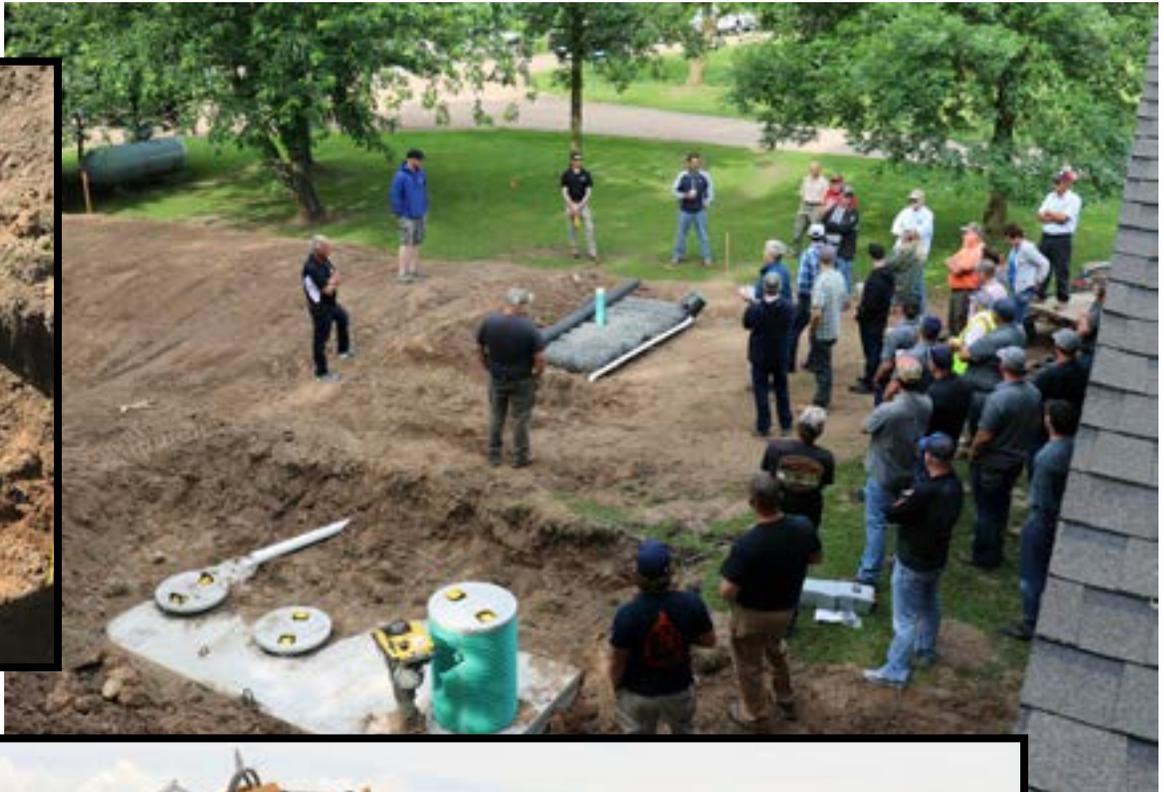
Despite packed schedules, SSTS professionals took time to attend the 2018 Summer Seminar at the rural farmstead of Melissa Besser in Ogilvie, Minnesota. The classroom session taught by MPCA staff started promptly at 8:30 a.m. and went to noon. Lunch was followed with a field session where participants got to sharpen their soils identification skills. The Soils Track earned folks 6 Soils CEUs. The day was capped off with a cookout, fun and games at the 3rd Annual Bellyachers' Pig-Out. All in all, the MOWA Summer Seminar was a great way to spend Friday, June 22nd in tropical Minnesota!



PAGE 4 - (top right) Aerial view of Bessler property; (center right) Hands-on instruction in soils identification; and (bottom) classroom instruction to earn CEUs.

PAGE 5 - (top left) Brandon Montgomery, MPCA staff instructor; (top right) set-up; (center) Roe-d-Hoe contest; (bottom right) Smiles all around from 2018 Summer Seminar participants; and (bottom left) Roe-d-Hoe winners!





**WELCOME
NEW
MOWA
MEMBERS**

John Buelow II
Buelow Excavating
Stillwater, MN

Tom Soderstrom
*Soderstrom Septic,
LLC*
Mora, MN

Mark Throener
Big Stone Excavating
Swanville, MN



Photo courtesy of Brian Koski, Septic Check

2018 MOWA Summer Seminar - Thank You to Our Sponsors

The strength of the Minnesota On-site Wastewater Association organization is the result of strong partnerships between practitioners and the on-site wastewater industry. Thanks to all of our sponsors who provided support and product demos in 2018!



The is a bi-monthly publication of the Minnesota Onsite Wastewater Association

Editor: Carla Tourin E-mail: MOWAcarla@aol.com

The articles printed in the publication do not necessarily reflect the opinion of this organization. Readers are encouraged to respond to the articles with their own points-of-view. We welcome industry-related comments or articles. Information or inquiries should be sent to any of the following: MN Onsite Wastewater Association, MOWA, 5021 Vernon Ave, So., Suite 241, Edina, MN 55436 Phone: 612.801.5897 Fax: 952.487.4447 Website: www.mowa-mn.com

NOWRA Mega-Conference, Continued from Page 2

- **Gain a competitive edge** – Useful and innovative programs and activities can be found in all corners of our industry. Bringing them together at a national conference presents you with a tremendous opportunity to find new ways to stand out from your competitors who don't attend.
- **Reconnect with old friends and colleagues and make new ones** – The Mega-Conference is a great place to build your network of contacts
- **Get a big picture view of our industry** – Get a better understanding of the trends and directions of the onsite industry. Onsite wastewater technology is being deployed in new ways to address water issues around the country. Staying current with these trends can help you identify future opportunities or challenges.

If any of these reasons to attend apply to you, you should plan to attend the Mega-Conference. Here are additional details about the conference:

Concurrent Sessions

Roughly 60 sessions will take place during six concurrent time slots, giving you lots of options for tailoring your attendance to your specific needs. Tracks include:

- Technical
- Policy & Regulations
- Minnesota Highlights and Panel Discussions
- NAWT O&M Training
- Reuse
- Nitrogen
- Funding & Decentralized
- Management
- State Affiliates Workshop
- Field Trips

Three great field trips are planned: 1) Large Onsite Systems and Concrete Tank Manufacturer tour, 2) University of Minnesota – Keys to Successful Design, 3) Reuse (half-day trip). Each field trip will be led by experienced professionals involved with the subject matter covered on that trip. Additional professionals will

NOWRA Mega-Conference, Continued on Page 9



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3009-KYDC



24" x 2" Riser
3008-GR2



20" x 2" Riser
3009-GR2



20" x 3" Riser / Riser Pan
3009-LPRP

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- 24" x 6" Riser - 3008
- 24" x 12" Riser - 3008-R12
- 20" x 6" Riser - 3009
- 20" x 12" Riser - 3009-R12
- 20" Riser Pan - 3009-RP
- 12" x 6" Riser - 3017-R



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NOWRA Mega-Conference, Continued from Page 7

be on hand at each location to discuss various aspects of the site being visited.

O&M Training

The National Association of Wastewater Technicians will be offering a full O&M training track with a variety of topics on important maintenance issues

Minnesota's Leadership in Onsite Wastewater

Minnesota is a recognized leader in onsite wastewater management, policy and financing. The Opening General Session will highlight Minnesota's overall approach to water policy and financing. Subsequent concurrent sessions will address Minnesota's approach to onsite system policies, and will also highlight the state's approach to such issues as frozen systems, point-of-sale inspections, and installation and design of systems near lakes or on small lots. MN Governor Dayton has been invited to speak on the state's approach to water, but had not confirmed at press time.

Roe-D-Hoe

MOWA will host the Minnesota Roe-D-Hoe competition, with the winner of the state competition being eligible for the National Backhoe Roe-D-Hoe® National Championship, which will held immediately following the conclusion of the state competition.

The national event brings together state Roe-D-Hoe champions from around the country and offers them a chance to compete against one another (and the top finishers from the MOWA competition) to determine the National Champion. A \$1,000 prize goes to the national Roe-D-Hoe winner, with smaller cash prizes for 2nd and 3rd places.

EPA's Role in Onsite Wastewater

The US EPA has added more resources to its decentralized wastewater management program and is looking for opportunities to provide greater support to the industry in terms of funding, education and public outreach. A senior EPA office from the Office of Water will detail the agency's approach to onsite wastewater and the role it plans to play in our industry.

Of particular interest will be a pair of EPA "Listening Sessions" which are currently being planned. The two listening sessions will focus on the role of education and training in meeting workforce demands. One session will focus on the need for expanded technical continuing education for industry professionals such as installers, designers, service providers and pumpers. The other will focus on higher education and the industry's need for more engineers, soil scientists, environmental scientists and other degreed professionals.

NOWRA Mega-Conference, Continued on Page 10

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“Where Quality is a Standard Not an Extra”

NOWRA Mega-Conference, Continued from Page 9

**Events You
Won't Want To Miss!**

"...On Sunday evening, plan to attend the Conference Welcome Reception.

On Monday evening, the Exhibitor Appreciation Reception is open to all.

The reception will be followed by an offsite event at US Bank Stadium..."

CEUs

Need to earn continuing education credits? Look no further than the Mega-Conference. At press time, conference staff is reaching out to state licensing boards to obtain their approval for classes held at the Mega-Conference. State approvals will be posted to the Mega-Conference website (www.nowra.org/2018mega).

Expo

Industry companies from around the country will be displaying their latest products and services in the expansive Mega-Conference Expo.

Whether your needs are immediate or longer-term, you'll want to visit as many companies as possible, as each company you

visit increases your chances of winning a cash jackpot! Each recipient will receive a bingo card which can be filled in by visiting the companies shown on the bingo card. At the end of both days of the Expo, people who complete their daily bingo card can enter them in a daily raffle for a \$500 cash prize!

Social Events

The Mega-Conference offers lots of social activities to encourage you to catch up with colleagues and make new friends. On Sunday evening, plan to attend the Conference Welcome Reception. On Monday evening, the Exhibitor Appreciation reception is open to all. That reception will be followed by an offsite event at US Bank Stadium, home of the 2018 Super Bowl. This is an optional ticketed event which will be held inside the stadium and will feature heavy hors d'oeuvres, cocktails and tours of the facility.

With so many activities, educational opportunities, and networking possibilities, there should be something for everyone at the 2018 Mega-Conference. As MOWA members, having this national event in your backyard gives you a tremendous opportunity to expand your educational options while also learning and sharing with folks like you from around the country. As you contemplate whether to attend, please keep in mind that attending an onsite conference at the state or national level should be viewed as an investment in you and your company, not an expense. We think you'll find more than enough value with the Mega-Conference to determine it is a worthy investment. A registration form is elsewhere in the *Little Digger* newsletter. Please feel free to use that, or visit the Mega-Conference website: www.nowra.org/2018mega.

Conference Headquarters Hotel

***Doubletree by Hilton Bloomington -
Minneapolis South***

7800 Normandale Boulevard, Bloomington, MN 5543-97800

952-835-7800

Room Rates

\$119 - single/double

\$129 - triple

\$139 - quad

Plus 14.275%
state/local tax



2018 NOWRA Mega-Conference Keynotes

Minnesota Onsite Wastewater Professionals to Share Expertise

Minnesota will be well represented when several Minnesota onsite wastewater regulatory and industry professionals deliver keynote addresses

The keynote address set for 8:10 a.m. on Monday, October 22nd will be Minnesota's Legacy - Water Resources. John Linc Stine, Commissioner at the Minnesota Pollution Control Agency, will be the presenter. The presentation will highlight steps Minnesotans took to protect water quality. In 2008, Minnesota's voters passed the Clean Water, Land and Legacy Amendment (Legacy Amendment) to the Minnesota Constitution to: protect drinking water sources; to protect, enhance, and restore wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve arts and cultural heritage; to support parks and trails; and to protect, enhance, and restore lakes, rivers, streams, and groundwater.

Stine will also discuss Governor Dayton's "25 by '25" strategy that has the goal of improving Minnesota's water quality 25 percent by 2025. Without additional actions, water quality is only expected to improve 6 to 8 percent by 2034. "25 by '25" is meant to engage local governments, businesses, farmers, scientists, and others in a new collaborative effort to restore and improve water

quality across Minnesota.

Gov. Dayton's proposal will not add new regulations, but will instead drive public engagement and partnerships to address Minnesota's water quality challenges. Efforts like this are why Minnesota is known as a leader in protecting its water resources.

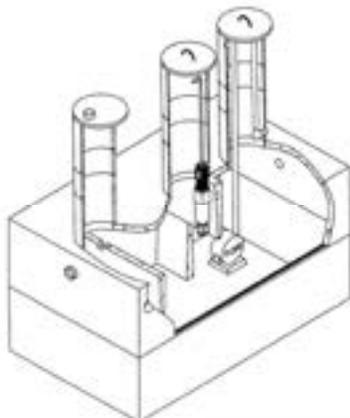
The opening keynote by Stine will be followed at 9 a.m. with Financing Decentralized Solutions in Minnesota. Presenters will be Minnesota's Jeff Freeman, Bill Dunn, Aaron Jensen, Dwight Wilcox and Eric VanDyken. Conference attendees will learn about Minnesota's long history of addressing the wastewater treatment needs of all Minnesotans. Officials have acknowledged that different situations call for different solutions and are committed to creating programs that serve individual homeowners, bare bones local units of government, and municipalities in rural or urban/rural transition areas. This panel of senior state and local government agency officials will describe the state's multi-faceted approach to managing water.

Conference keynotes
will highlight the steps
Minnesotans took to protect
water quality

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REGISTRATION FORM

2018 ONSITE WASTEWATER MEGA-CONFERENCE

OCTOBER 21-24, 2018



Doubletree by Hilton Minneapolis South, Bloomington, MN

Registrations will only be accepted with payment in full. Faxed registrations must include credit card payment.

Please print:

Full Name _____

Name for badge _____ Title _____

Company/Org. _____

Street Address _____

City/State/Zip _____

Daytime phone _____ Email _____

Please indicate if you are a member of () NAWT () NOWRA (Note: Includes all members of MOWA, AxOWRA, COWA, CPOW, DOWRA, FOWA, GOWA, IOWPA, IOWWA, KSFA, MOWPA, MOWRA, MSO, NOWWA, O2WA, POWRA-NM, POWRA-PA, TOWA-TN, TOWA-TX, UOWA, VOWRA, WOWRA, WOSSA and YOWA)

Select fees	Until Sept 26	After Sept 26	Amount
MEMBERS:			
<input type="checkbox"/> NOWRA/MOWA/NAWT Professional Members	\$275	\$375	\$ _____
<input type="checkbox"/> Additional member from same company	\$225	\$325	\$ _____
<input type="checkbox"/> NOWRA/MOWA/NAWT Regulator Members	\$225	\$325	\$ _____
<input type="checkbox"/> Additional member from same agency	\$200	\$300	\$ _____
<input type="checkbox"/> NOWRA/MOWA/NAWT Members One Day <i>Specify date: <input type="checkbox"/>10/22/18 or <input type="checkbox"/>10/23/18</i>	\$175	\$275	\$ _____
<input type="checkbox"/> Additional member from same company/org <i>Specify date: <input type="checkbox"/>10/22/18 or <input type="checkbox"/>10/23/18</i>	\$150	\$200	\$ _____
NON-MEMBERS (includes 1-year of membership)			
<i>Specify which organization you wish to join: <input type="checkbox"/> NAWT <input type="checkbox"/> NOWRA</i>			
<input type="checkbox"/> Non-Members: Professional	\$375	\$475	\$ _____
<input type="checkbox"/> Non-Members: Regulators	\$325	\$425	\$ _____
<input type="checkbox"/> Non-Members: One-Day Registration Choose date: <input type="checkbox"/> 10/22 <input type="checkbox"/> 10/23	\$275	\$325	\$ _____
<input type="checkbox"/> Students	\$175	\$250	\$ _____
<input type="checkbox"/> Spouse/Guest (Name _____)	\$125	\$150	\$ _____
OPTIONAL EVENTS			
<input type="checkbox"/> Social Event, Oct 22 <input type="checkbox"/> Add spouse/guest (Name _____)	\$49	\$69	\$ _____
<input type="checkbox"/> Oct. 24 Field Trip 1 (Soils & Design)	\$75	\$100	\$ _____
<input type="checkbox"/> Oct. 24 Field Trip 2 (Large Systems)	\$75	\$100	\$ _____
<input type="checkbox"/> <input type="checkbox"/> Oct. 24 Field Trip 3 (Reuse)	\$50	\$75	\$ _____
Enter promo code			\$ _____
Total			\$ _____

Payment Information (NOWRA EIN# 593099430)

My check (payable to NOWRA) in the amount of \$ _____ is enclosed

Please charge my Visa Mastercard Amex Discover in the amount of \$ _____

Number _____ Exp. ____ / ____ Security Code _____

Name on card _____

Billing Address _____

Signature (required) _____

NOWRA, 4601 Fairfax Dr., Suite 1200, Arlington, VA 22203, Fax: 703-997-5609
 Website: www.NOWRA.org/2018Mega Inquiries? Call: 800-966-2942 Email: executivedirector@nowra.org



MPCA: Soils verification required in permit process

Innovative Solutions for Septic Design in Difficult Soils

Minnesota designer gets creative when faced with rocky soil and problematic floodplains

By Scottie Dayton, December 08, 2016 - Onsite Installer



Watab President Tim Haeg wears many hats in the course of his company's work, including site evaluation prior to septic system design. Here he stands in a test pit comparing soil samples with a Munsell color chart.

The Minnesota Pollution Control Agency adopted new septic rules in 2008, and then further refined them in 2011. One of the state's rules requires counties to verify soils before issuing permits, and regulators often pass the responsibility on to system designers.

The rules also focus on the percentage of rock fragments in sandy soil. Rock fragments include gravel, stones and cobble larger than 2 mm. "The greater the percentage of rock in a foot of soil, the less treatment credit it has," says Tim Haeg, advanced designer and owner of Watab in St. Joseph, Minnesota. "Soils with greater than 50 percent rock fragments larger than 2 mm have no treatment credit." Furthermore, dispersal media cannot contact soils with greater than 35 percent rock fragments.

Haeg works mostly in Stearns County, where glacial outwash plains have zero treatment areas. "Initially, many contractors believed they'd have to build mound systems," says Haeg. "There was a lot of stress in how to deal with those sites because

they could dig to China without hitting the water table and establishing the required 3 feet of vertical separation."

Haeg took a step back to gain fresh insight. "There's a difference between a limiting condition such as water tables or seasonally high saturated soils and soils that don't offer treatment credits," he says. His design solution was to excavate the no-credit soil, bring in clean washed sand, and build on top of it. Now soil corrections are becoming commonplace to mitigate unbuildable sites.

Minnesota's numerous lakes created another challenge for Haeg. A lakeside property had a floodplain elevation that required a mound so tall that the footprint wouldn't fit on the lot. Haeg's solution split the system into a single-pass sand filter inside a PVC-lined basin, then pumping the effluent to a shorter mound with fewer chambers (Infiltrator Water Technologies).

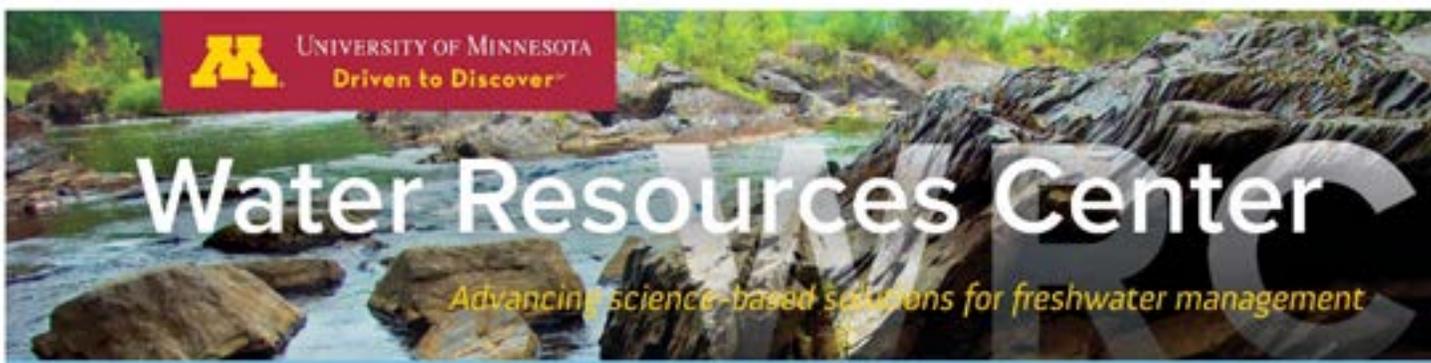
"We achieved the 3 feet of vertical separation in two stages," he says. "Wastewater passed through 2 feet of sand, then into the mound with 12 inches of vertical separation. We called it our 2+1 system and have several in service."

Soil verification

In 2017, there were 200 (95%) LGUs that reported verifying soils at some time before, during, or after system construction. There were 131 (62%) LGUs that reported verifying soils before construction and 52 (25%) LGUs reported verifying soils during construction. Seventeen LGUs reported verifying soils after construction (six counties). Eleven (5%) LGUs (four counties) reported they do not verify soils at any time before, during, or after system construction. Those jurisdictions not verifying soils were contacted and the requirements of Minn. R. ch. 7082.0500 discussed with them throughout the state.

From 2017 SSTS Annual Report - April 2018

This article first appeared in the December 8, 2016 issue of Onsite Installer magazine, published by COLE Publishing Inc., www.onsiteinstaller.com. It is reprinted by permission.

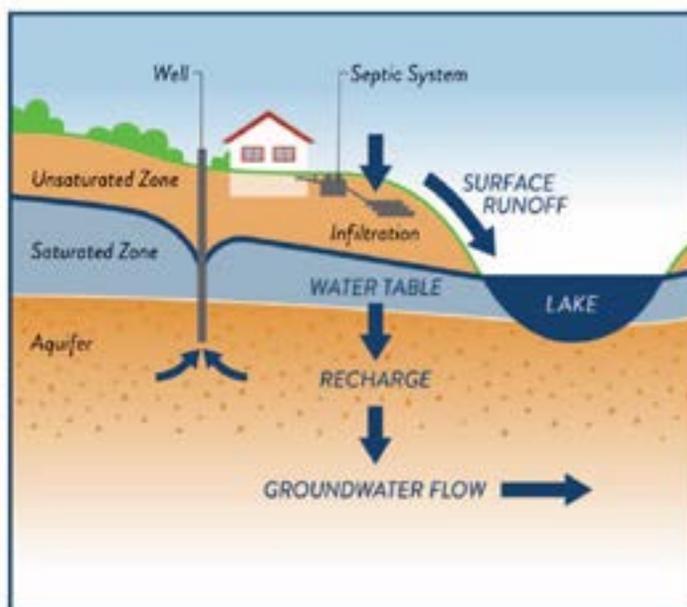


Protecting our Water Takes Good Drinking Water and Septic Systems

There is growing concern about new chemicals in our groundwater, drinking water, lakes, rivers and streams.

These “chemicals of emerging concern” (CEC) include products we use every day around our homes—cleaning products, over-the-counter medicines, and pharmaceuticals.

CECs can present a health risk and are more likely to get into our drinking water if we do not have good drinking water or septic systems. Properly constructed and maintained drinking water and septic systems can provide safe and reliable drinking water and wastewater treatment for decades.



Good Septic System Includes

- A watertight septic tank.
- A soil treatment area – typically a drainfield or a mound with the appropriate soil conditions for treatment of wastewater.
- Proper operation being conservative with water use and cleaners.
- Maintained appropriately with an evaluation at least every three years.

Failing Septic System

- Failing septic systems can cause sewage to back-up in the home or come to the surface. Failing systems are more likely to release CECs and harmful bacteria, viruses, and other microorganisms into the environment. Failing systems
- Do not have watertight tanks and may have cracked tanks, seepage pits and drywells.
- Do not have the required soil conditions beneath the soil treatment area.

Good Drinking Water System Includes

- Proper well construction and maintenance.
- Proper installation, back siphon protection, and maintenance of distribution systems, including water treatment devices, water lines, and fixtures.
- Maintaining isolation distances from contamination sources.
- Leaking or dripping fixtures and pipes.

Drinking Water System Posing Health Risks

- Wells in pits.
- Shallow uncased wells.
- Unused wells that are not sealed.
- Wells with damaged casing or openings.
- Cross connections between water lines and potential sources of contamination without protection-plumbing device or air gap
- Sources of contamination stored or unmanaged near your well

What You Can Do to Protect Our Water

Private drinking water and septic systems are critical to public health and the environment. Make sure your drinking water and septic systems are operating properly by following the lists below. Just like other infrastructure around a home or business, drinking water and septic systems need regular maintenance and eventual replacement. Effective operation saves money and protects water resources. Consult a local licensed septic system professional or licensed well driller if you are having any problems or issues.

Septic System Operation and Maintenance

Evaluate and clean septic tanks at least every 3 years (state code) by a licensed septic system maintainer/pumper.

Walk the drainfield area every year to ensure proper operation.

Avoid compacting the soil treatment area.

Maintain healthy vegetation (no irrigation or fertilizer needed).

Be mindful about water use. Your system should not be loaded at more than 70% of its peak design flow; spread water usage through the day and week.

Repair (or replace) leaking faucets and toilets.

Only human waste and toilet paper should go in the toilet. No wipes, feminine products, cotton balls, etc.

Use cleaners wisely: Use only as much cleaner as needed and avoid toxic chemicals with “poison or danger” on the label.

Do NOT use antibacterial products. They kill good bacteria too!

Properly dispose of hazardous waste and unused medicines through local take back programs.

Drinking Water System Operation & Maintenance



Also, test for manganese at least once if a baby will drink (dry formula) the water.

Inspect your wellhead regularly

- **Damage:** Any cracks or holes in well casing, corrosion, loose wires, or soil settling?
- **Well cap:** Is it securely attached to the well casing? Is it broken or missing?
- **Connections:** Are the electrical conduit and other connections watertight?

Protect your well

- Keep top of well at least 1-foot above ground.
- Do not use, store, or dispose of potential pollutants (such as fertilizers, pesticides, or hazardous chemicals) near your well.

Seal unused wells

Maintain water treatment devices

Check for and address leaks and drips

Helpful Resources

- **UMN Onsite Sewage Treatment Program** (www.septic.umn.edu).
- **MPCA Subsurface Sewage Treatment Systems** (www.pca.state.mn.us/water/subsurface-sewage-treatment-systems)
- **Water and Health** (www.health.state.mn.us/topics/water/).
- **Wells and Borings** (www.health.state.mn.us/divs/eh/wells/)
- **Find natural products:** Select products with a grade of “A” by the Environmental Working Group (<https://www.ewg.org>).
- **Find your household hazardous waste collection site** (<https://www.pca.state.mn.us/living-green/find-your-household-hazardous-waste-collection-site>).





OSTP and Dept. of Health Offer Training

Free Septic System and Private Well Homeowner Classes Set

The UMN Onsite Sewage Treatment Program and Minnesota Dept. of Health are offering FREE septic system and private well homeowner education classes across Minnesota. This class will cover the basics of how septic systems function, well water testing, and how to help protect your well from contamination sources. It will also provide property owners information on chemicals of emerging concern (CEC) including pharmaceuticals, personal care products, and the potential impact on ground and surface water. Information on proper maintenance of both septic systems and private drinking water systems will be covered to help property owners protect their investments and the environment.

October 2, 2018 - Washington County

5:30 p.m. - Hooley Hall
12300 40th St N, Stillwater, MN

Contact: Stephanie Souter, Kati Hallerman Email: Kati.Hallermann@co.washington.mn.us / Stephanie.Souter@co.washington.mn.us / Phone: 651-430-6655
www.co.washington.mn.us/septic

November 6, 2018 - Dakota County

6:00 p.m. - Extension & Conservation Center
4100 220th Street W Ste 101, Farmington, MN

Contact: Emily Gable, Email: emily.gable@co.dakota.mn.us / Phone: 952-891-7008
www.co.dakota.mn.us/Environment/WaterQuality/SepticSystem

March 7, 2019 - Blue Earth/Nicollet Counties

5:30 p.m. - Blue Earth Government Center
410 South 5th Street, Mankato, MN

Contact: Pete Otterness, Email: Pete.Otterness@co.nicollet.mn.us / Phone: 507-934-7076

May 9, 2019 - Anoka County

6:00 p.m. - Coon Lake Beach Community and Senior Center
182 Forest Road, East Bethel, MN

Contact: Bart F. Biernat, Email: Bart.Biernat@co.anoka.mn.us / Phone: 763-324-4207

2018 OSTP Certification Course Descriptions and Offerings

Introduction to Onsite Systems (15 Direct Credits)

Fee: \$360 Exam: Yes

This 15-hour workshop is the foundation for all SSTS certification courses and is best completed prior to the other workshops. It prepares participants for the Basic exam and provides an overview of onsite treatment options and concepts. Enrollment in this workshop includes a copy of the Manual for SSTS Professionals in Minnesota.

Topics include:

- Treatment of wastewater
- Site evaluation
- Wastewater characteristics
- Soil treatment systems

10-3 Mankato - Americlnn 11/12-14/18 Deadline: 11/5/18

Installing Onsite Systems (12 Direct Credits)

Fee: \$265 Exam: Yes

This 12-hour workshop prepares attendees for the Installer exam and provides information about proper installation practices.

PREREQUISITE: Introduction to Onsite Systems

Topics include:

- Construction planning
- Tools for installing
- Construction practices
- Pipelayer certification

112-3 Mankato - Americlnn 11/15-16/18 Deadline: 11/8/18

Installer Continuing Education (12 Direct Credits)

Fee: \$265 Exam: No

This 12-hour workshop will meet the continuing education requirements for any certification but is specifically tailored for Installers. All information will be provided from the perspective of a system installer.

Topics Include:

- Construction safety
- Keys to proper installation
- Pumps and dosing
- Rule change implications

69-3 Grand Rapids - Sawmill Inn 12/6-7/18 Deadline: 11/29/18

General Continuing Education (12 Direct Credits)

Fee: \$265 Exam: No

This 12-hour workshop is designed to meet the continuing education requirement for SSTS professional registration. The topics will be varied to give a wide range of information for SSTS professionals.

Topics include:

- Rule change implications
- Pressure distribution
- Working on difficult sites
- MPCA update

60-3 Alexandria - Douglas County 11/6-7/18 Deadline: 10/30/18
Public Works Building

60-4 Mankato - Americlnn 12/11-12/18 Deadline: 12/4/18

Soils Continuing Education (6 Soils-Specific Direct Credits)

Fee: \$240 or \$405 with Munsell Color Guide Exam: No

This 6-hour course couples classroom and field training to meet soils-specific MPCA continuing educational requirements for designers and inspectors. Munsell Color Guides are available for \$165 and Sand Cards for \$10.

Topics include:

- Regional geology and soils
- Local soil hydrology information
- Soils observations
- System siting and design

55-6 Two Harbors - Superior Shores 9/6/18 Deadline: 8/30/18
Resort

55-7 Waseca - Southern Research 10/10/18 Deadline: 10/3/18
and Outreach Center

Payment is required to reserve a spot in any course.

Confirmation with instructions will be EMAILED along with a receipt.

**Questions?
Call: 1-800-322-8642**

Enroll online: septic.umn.edu

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Tony Ruppert Scholarship Deadline is August 15th

2018 Tony Ruppert Scholarship Application Period Opens

The Minnesota Onsite Wastewater Association (MOWA) is pleased to announce that applications are now being accepted for the Tony Ruppert Scholarship Fund. Up to \$5,000 in scholarships are available to high school graduates (as of June 2018) who will be enrolled as a full-time student in post-secondary undergraduate education during the 2018- 2019 school year.

Applicants must be no more than 26 years old as of June 1, 2018 and be a MOWA member, or a child, sibling, grandchild, or niece/nephew of a MOWA member. Students may only win this scholarship once. Students must complete an application, write an essay, and provide certification of the relationship to a MOWA member or member's employee.

A complete application must include: (3 items)

Item 1: Application Form (To be completed by the student; you may use this form or print all required items on a separate sheet.)

Please type or print clearly:

Name: _____ Social Security #: _____

Address: _____ City/State/Zip: _____

Phone: _____ E mail address _____

Year graduated from high school _____ MOWA Member Name _____

Name of school you are/will be attending: _____ (Must be a full time student)

Curriculum you are/will be enrolled in: _____

All of the above information is true and correct and I hereby grant permission to MOWA to reprint my essay or abstract in whole, or in part, or use the created digital media for informational or advertising purposes, such as on the MOWA website or as a MOWA newsletter article or press release.

_____ (Applicant's signature)

Item 2: Essay. See Essay Content Form

Item 3: Certification Form: (To be completed by the MOWA member)

Name of Applicant for Tony Ruppert Scholarship: _____

The Tony Ruppert Scholarship Fund Applicant is my: _____ (insert relation).

I agree that the information contained in this form is true and correct to the best of my knowledge:

MOWA Member Name (printed): _____

MOWA Member Signature: _____ Date: _____

Business Name and Address: _____

All applications must be submitted to MOWA no later than August 15, 2018. Applications will be rated by a panel of MOWA members. Winners will be notified in September 2018.

Send the complete application (with essay in Word format) to: mowacarla@aol.com

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2018 MOWA MEMBERSHIP APPLICATION

Membership: Renewal New Member

- Individual Member \$240 (1 person)
 Business Group /Government Unit \$340 (up to 5 people; \$100 /person after 5)
 Student \$140 (1 person)
 Life-time Honorary

Note: Your MOWA Membership includes one NOWRA membership

Memberships are based on calendar year - After July 1st, new members pay \$140-individual / \$190-business or gov't groups for remainder of 2018

Individual/Group Contact: This person will be listed as the NOWRA member on the Septic Locator website. They will be listed first in all MOWA publications. Please print clearly.

• 1st Member _____ Company Name _____
 Address _____ City/State/Zip _____
 Title _____ Phone _____ Mobile/800# _____ Fax _____
 Email _____ Website _____ County _____

Circle the counties you work in: Needed for Directory and website.

Statewide..... 88	Clay 14	Hubbard 29	Marshall 44	Pipestone 59	Steele 74
Aitkin..... 1	Clearwater 15	Isanti 30	Martin 45	Polk 60	Stevens 75
Anoka 2	Cook 16	Itasca 31	McLeod 46	Pope 61	Swift 76
Becker 3	Cottonwood 17	Jackson 32	Meeker 47	Ramsey 62	Todd 77
Beltrami 4	Crow Wing 18	Kanabec 33	Mille Lacs 48	Red Lake 63	Traverse 78
Benton 5	Dakota 19	Kandiyohi 34	Morrison 49	Redwood 64	Wabasha 79
Big Stone 6	Dodge 20	Kittson 35	Mower 50	Renville 65	Wadena 80
Blue Earth 7	Douglas 21	Koochiching 36	Murray 51	Rice 66	Waseca 81
Brown 8	Faribault 22	Lac qui Parle Lake 37	Nicollet 52	Rock 67	Washington 82
Carlton 9	Fillmore 23	Lake 38	Nobles 53	Roseau 68	Watonwan 83
Carver 10	Freeborn 24	Lake of the Woods 39	Norman 54	Scott 69	Wilkin 84
Cass 11	Goodhue 25	Le Sueur 40	Olmsted 55	Sherburne 70	Winona 85
Chippewa 12	Grant 26	Lincoln 41	Otter Tail 56	Sibley 71	Wright 86
Chisago 13	Hennepin 27	Lyon 42	Pennington 57	St. Louis 72	Yellow Medicine 87
	Houston 28	Mahnomen 43	Pine 58	Stearns 73	

Information: (Check all that apply)

- Installer Pumper Designer Inspector Gov't Regulator Educator Service Provider Student
 Soil Scientist Professional Engineer Manufacturer Operator/Maintenance Supplier Other: _____

Additional Business/Government Members:

• 2nd Member _____ Title _____ County _____
 Address _____ City/State/Zip _____
 Phone _____ Mobile/800# _____ Fax _____ Email _____
 • 3rd Member _____ Title _____ County _____
 Address _____ City/State/Zip _____
 Phone _____ Mobile/800# _____ Fax _____ Email _____
 (Please list additional business/government group members on separate sheet with complete contact information.)

Publications: Would you prefer receiving 'Little Digger' newsletters via ... Regular Mail Electronically
 We currently send one publication per address to business/government groups. Contact the MOWA office if you'd like additional copies.

Additional NOWRA Memberships: MOWA membership fees include one NOWRA membership per company/organization. List names of members who want additional NOWRA memberships here: Cost - \$40 per person.

2) _____ 3) _____ 4) _____ 5) _____

Payment: (Please print) MOWA Membership \$ _____ + Add'l NOWRA Memberships = **Amount: \$** _____
 Check enclosed (Payable to MOWA) VISA MasterCard
 Card Number: _____ CVV: _____ Expiration Date: _____ Cardholder Name: _____
 Signature: _____ Date _____

MOWA, 5021 Vernon Ave, So., Suite 241, Edina, MN 55436 Phone: 612.801.5897 Fax: 952.487.4447

Note: Dues payable to MOWA are not deductible as a charitable contribution but may be deductible as an ordinary and necessary business expense. MOWA estimates that 10% of your MOWA dues are used for governmental affairs issues and therefore are not deductible.



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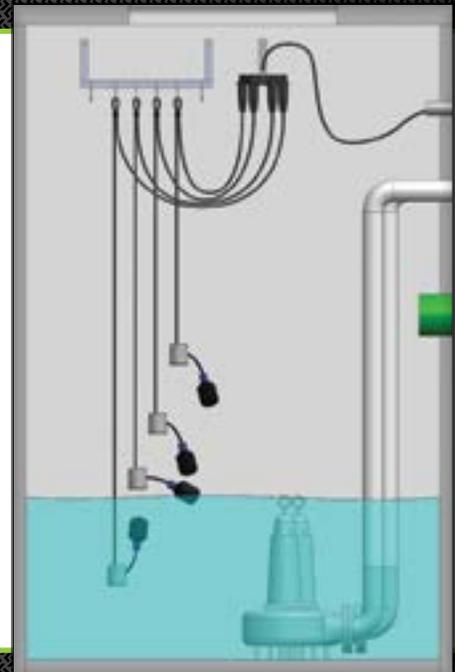
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