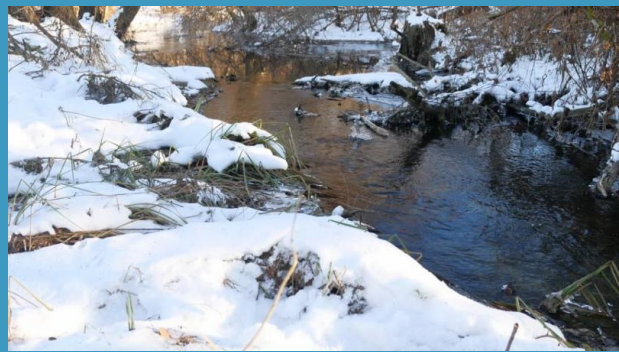




Yankee Onsite Wastewater Association Newsletter



Spring 2020

President's Corner

I am not sure if it is a curse or a blessing but there is that old expression which applies now more than ever: "May you live in interesting times".

First and foremost, I hope all of you are healthy and practicing appropriate safety precautions to ensure your well-being.

Second, here are **some updates from YOWA** to share with you:

1. We have begun our change of administrative support in earnest to NEWEA - the New England Water Environment Association. This talented team of non-profit managers already works with wastewater issues and knows how to help support us as we continue to grow into a strong presence in the onsite wastewater industry community.
2. Speaking of growing, membership is up 5% from this time last year, so thank you everyone! [Encourage your coworkers to renew or join >>](#)
3. The Board adopted its operating budget in 2020 which includes continuing and expanding our educational efforts, building administrative support services and squaring away some legacy operational permitting issues.
4. Our nation-wide professional association, [NOWRA](#), of which we are the New England chapter, recently held a fantastic and in-depth seminar available to members on Covid-19

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QUICK LINKS

risks to onsite wastewater professionals. They also held workshops on federal funding available for small businesses. The recorded webinar is available for free from NOWRA at: <https://www.pathlms.com/nowra/courses/17271>

5. The MEHA/YOWA Conference scheduled on March 11th was cancelled due to safety concerns. Over 175 attendees had registered to attend. MEHA is investigating whether to offer an online format for this event.
6. MassDEP continues to advance the Title 5 and Groundwater Discharge Regulatory Review Stakeholder Group, of which YOWA is a member.
7. We continue to expand our training/education program to our members. In the current situation of COVID-19, NOWRA's online education platform allows our members with instant access to the training they need to maintain their certifications.

Some upcoming items for onsite wastewater professionals to note:

1. Septic Smart week set for September 14-18, 2020. Check out promotional materials at [EPA's website >>](#)
2. NEIWPC & YOWA's Annual Title 5 Technical Seminar originally scheduled for May 27th will now be held on November 18, 2020. Watch for more information!
3. NOWRA's Annual Conference is scheduled for October 25-28 in Hampton, Virginia. Remember, YOWA Members are automatically members of NOWRA! [Submit a paper for presentation >>](#)

On behalf of the entire Board of Directors we would like to extend a sincere note of appreciation to the local health officials as their world has gone upside down of late in trying to help contain this pandemic. Thank you very much for the important work that you have done and continue to do to keep all of us safe.

Sincerely,
Daniel Ottenheimer, P.E.
YOWA President

Wastewater and COVID-19: What are the risks?

By Dr. Sara Heger

Wastewater treatment plant (WWTP) operators and subsurface sewage treatment system (SSTS) maintainers, service providers and installers that clean out septic, holding, and pump tanks along with aerobic treatment units, perform operation and maintenance,

[YOWA Website](#)

[Join/Renew Your Membership](#)

[Calendar](#)

[Contact Us](#)

**DON'T DELAY
RENEW TODAY!**

It's time to renew your membership for 2020!

New this year - [Renew online](#) and pay by credit card.

Can't renew online? Fill out the [membership form](#) and send payment

Remember membership in YOWA includes membership in NOWRA.

*Membership Period:
January 1-December 31*

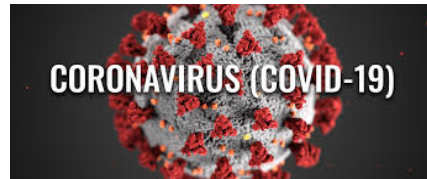


**UPCOMING
EVENTS**

**YOWA co-sponsors
NEIWPC's Annual
Title 5 Technical
Seminar
November 18, 2020**

**Watch for more
information**

and repairs are commonly exposed to untreated wastewater that contains disease-causing organisms including pathogens which are primarily bacteria and viruses.



When wastewater professionals are working on a system it is unlikely to know the specific disease-causing organism are in the wastewater including COVID-19. COVID-19 concentrations and survival in feces, sewage or water are currently unknown. The virus that causes COVID-19 has been detected in the feces of some patients diagnosed with COVID-19. The amount of virus released from the body (shed) in stool, how long the virus is shed, and whether the virus in stool is infectious are not known. According to research conducted by the Washington Onsite Sewage Association, the aerosolization of sewage through standard methods of pumping pose the greatest unrecognized risk to workers as they found the act of opening the lids on tankage and lifts stations exposed workers to aerosolized pathogens.

The risk of transmission of COVID-19 from the feces of an infected person is also unknown. However, the risk is expected to be low based on data from previous outbreaks of related coronaviruses, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). There have been no reports of fecal-oral transmission of COVID-19 to date. SARS has been detected in untreated sewage for up to 2 to 14 days. In the 2003 SARS outbreak, there was documented transmission associated with sewage aerosols.

Here is what we know to date:

The World Health Organization WHO has indicated that "there is no evidence to date that COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment."



Park Rangers at Mt Rainier Base camp cleaning out the toilets into 55 gallon drums

Wastewater treatment plants and septic systems treat viruses and other pathogens. COVID-19 is a type of virus that is particularly susceptible to disinfection. Standard treatment and disinfectant processes at wastewater treatment plants are expected to be effective. Septic systems use similar processes along with unsaturated soil to treat pathogens.

The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) states there is no evidence to suggest that additional, COVID-19 specific protections are needed for employees in wastewater management operations, and OSHA encourages workers follow routing practices to prevent exposure to wastewater.

**NOWRA Onsite
 Wastewater
 Mega Conference
 October 25-28, 2020
 Hampton, VA**

[Call for Papers >>](#)

**EPA
 SEPTIC SMART
 WEEK**

Sept. 14-18th

Mark Your Calendars for
 September 14-18, 2020
 as it's EPA's SepticSmart
 Week.

The goal of SepticSmart
 Week is to inform
 homeowners on:

- Proper septic system care and maintenance;
- Assist local agencies in promoting homeowner education and awareness;
- Educate local decision makers on infrastructure options to improve and sustain their communities.

Please visit
www.epa.gov/septic for
 more homeowner
 resources

[Download the
 SepticSmart Week Flyer](#)

The Center for Disease Control and Prevention (CDC) notes that wastewater and sewage workers should use standard practices of basic hygiene precautions (e.g. handwashing) and wearing personal protective equipment (PPE) as prescribed for current work task. In consultation with local health officials, onsite sewage system professionals should consider the following routine disease prevention practices for onsite sewage system tank cleaning, operation and maintenance, and repairs to help protect service providers from potential infection of COVID-19.

How to protect yourself, your workers and your families:

Operators and SSTS professional are performing essential tasks need to protect public health and safety and must continue to work during this outbreak therefore it is critical that they do it safely. Wastewater professionals must be provided proper personal protective equipment (PPE), be training on how to use it, and hand washing facilities/waterless sanitizers. Workers should avoid touching their face, mouth, eyes, nose, and open sores and cuts and chewing gum or tobacco while handling sewage. Workers should wash hands with soap and water immediately after removing PPE or use waterless sanitizers. Do keep in mind that waterless hand sanitizers are not as effective on hands that are dirty with grime and grit therefore it is advisable to use soap and water prior to eating or drinking.



Must minimize hand to face contact. The observed average face to contact of workers in the industry was 18 times during a typical 45 minute pump out during field study (WOSSA)

The following PPE is recommended for workers handling human waste or sewage:

Goggles: to protect eyes from splashes of human waste or sewage.

Protective face mask or splash-proof face shield: to protect nose and mouth from splashes/ aerosolization of human waste or sewage. Depending on the type of works this could include N95 masks with a verification of "face fit" testing for the employee including the limitation of facial hair.

Liquid-repellent coveralls: to keep human waste or sewage off clothing.

Waterproof gloves: to prevent exposure to human waste or sewage.



Back flushing to break up the scum layer is intense aerosolization of liquids with no eye or respiratory protection with humidity and cool weather shows how much aerosolization is occurring.

DID YOU KNOW?

Yankee Onsite Wastewater Association (YOWA) is a New England based organization for onsite wastewater professionals.

MassDEP News



MassDEP continues to advance the Title 5 and Groundwater Discharge Regulatory Review Stakeholder Group, of which YOWA is a member.

- MassDEP is working to develop policies for moldering (remote woodland) toilets;
- Funding virus research to see if water table separation might be modified from

Rubber boots: to prevent exposure to human waste or sewage.

Keep in mind that wastewater professionals in high-risk categories due to age, high issues or have family members at risk should be particularly careful working around untreated sewage. Therefore, removing work cloths before returning home is advisable.

For more information see:

[OSHA.gov](https://www.osha.gov)

[OSHA.gov](https://www.osha.gov) Face and Eye Protection

[EPA.gov](https://www.epa.gov)

Dr. Sara Heger is an engineer, researcher and instructor in the Onsite Sewage Treatment Program in the Water Resources Center at the University of Minnesota.

YOWA Sponsors National Expert Speaker

A sold out crowd was present at the December 5th YOWA workshop when featured speaker Larry Stephens, P.E. took to the stage at UMass Amherst's Mt. Ida Campus in Newton. YOWA sponsored this nationally recognized expert from Michigan to speak about the issues related to design, construction, and servicing of various types of pump systems. Over 50 attendees from state and local regulators, academic officials, service providers, product vendors, designers and installers participated in this event.



National Expert Larry Stephens, P.E. addressed attendees at the Dec 5th YOWA workshop

Mr. Stephens began his career as a regional engineer with the Michigan Department of Public Health. After 12 years of service he established a consulting service and has been at it ever since. "I like the problem-solving nature of this business" he said when asked of his feelings about the onsite wastewater industry.

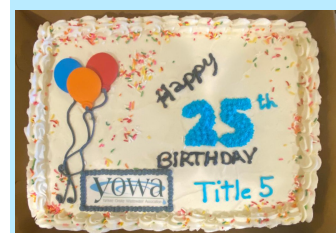
His session covered topics such as what happens to water once it reaches the soil, gravity versus pump systems, why there is no need to fear pumps, the different types of pumps and their controllers and how to select the correct one for each application, and proper design and operation of pressure distribution systems.

In addition, YOWA Board member Alyssa Rusiecki, RS, presented on pumps and pump systems from the perspective of Title 5. She addressed when and how pumps are to be used from a regulatory requirement perspective and emphasized the need to use proper terminology when designing systems with pumps. An example Alyssa shared was when pumping to a distribution box the appropriate term is "pressure dosing", whereas when pumping to a network of small diameter perforated piping the proper term is

the current requirements;

- Undertaking research on design flow requirements for multi-unit residential structures, and studying nitrogen sensitive areas as defined in Title 5;
- They reviewed but decided against a category of permitting to be created between the flows in Title 5 regulations; and those in the Ground Water Discharge regulations; and
- Staffing in the Western regional office wastewater program was recently added to replace a number of retirement vacancies as was a new head of the Innovative and Alternative technology permitting program.

Celebrating 25th Anniversary of Title 5



"pressure distribution".

The session was well received by those in attendance. Much appreciation goes out to YOWA's Education Committee of John Murphy, Alyssa Rusiecki and Tom Groves and support staff Janice Moran at YOWA's offices at NEWEA.

Don't Forget to Renew Your Membership

YOWA memberships are due for renewal at the beginning of each calendar year. Help ensure our organization stays strong for the coming year by continuing your membership.



[Join or Renew Online>>](#)

History of Title 5

Effective on January 1, 1995 the MassDEP rolled out the new version of Title 5 after significant scientific, technical and public policy research and debate. To their credit, MassDEP realized the 1978 set of regulations was lacking in many ways and retained DeFao, Wait & Associates to examine the status of scientific research around pollutant removal along with a comparison of other state regulations at that time.

This study resulted in the version of Title 5 that has been in use for the last 25 years. The regulation has given rise to a number of new professions in the industry such as system inspectors and operators, played a significant part in incentivizing the development of many new technologies, driven the identification of previously unrecognized substandard and polluting systems being identified as well as their repair, and spawned the birth of professional associations such as YOWA.

Many major changes occurred as a direct result of Title 5. These include:

- Use of a more exacting methodology to assess location of the water table, which led to the establishment of a Soil Evaluator training and certification program;
- Recognition and management of additional types of treatment and dispersal systems other than the conventional the septic tank with stone-and-pipe soil absorption system through the creation of an Innovative and Alternative approval program;
- Creation of a System Inspector training and certification program, with a focus on locating legacy onsite systems which may be polluting surface or groundwater;

On the 25th Anniversary of this nationally-significant set of regulations, YOWA partnered with the Massachusetts Health Officers Association (MHOA), to acknowledge this milestone during their March 2020 training sessions.

We were able to share the anniversary of Title 5 with the health officers and DEP staff who were present at: March 3rd in Devens, MA; March 5th in Hyannis, MA and March 10th in Peabody, MA. A celebratory cake was served at each event.

YOWA looks forward to helping shape the next 25 years of regulations, policies and procedures to make the onsite wastewater industry, and those who practice in it, in Massachusetts to be the best that it - and we - can be.

OUR MISSION

To provide knowledge, grow the profession, and educate the membership of the designers, installers, service providers, system owners and regulators to protect the environment and public health and to promote sustainable onsite wastewater systems in Massachusetts and beyond.

- Development of a mechanism to encourage upgrades to be fully compliant while also allowing flexibility as might be authorized by local officials through the Local Upgrade Approval procedure;
- Identification of nitrogen as a pollutant of concern for public health and environmental reasons, and establishing appropriate soil loading rate requirements and sensitive embayment designations;
- Creation of a unique much-needed facility to allow emerging concepts in wastewater treatment and dispersal to be examined under real-world conditions with funding of the Massachusetts Alternative System Test Center (MASSTC) operated by Barnstable County on Cape Cod;
- Reduction of the regulatory threshold between Title 5 and Groundwater Discharge Permit from 15,000 GPD design flow to 10,000 GPD design flow; and
- An innumerable number of smaller but significant changes, including: allowing the use of composting toilets, allowing the use of gray water systems, allowing shared systems, defining emergency repairs, creating a procedure for calculating design flow for unique facilities, prohibiting septic system additives that are not approved for use, and many others.

YOWA wishes to take this opportunity to acknowledge the people at MassDEP who took the initiative to create these revised regulations 25 years ago, and to thank all the state and local officials who are or were involved in its implementation over the last two and one half decades. It is acknowledged that DEP staff has been cut almost in half since the 1995 regulations occurred yet the responsibilities remain ever challenging, while local health officials who implement this complex regulation are burdened with many other responsibilities beyond implementing this one regulation.

NOWRA Onsite Wastewater Mega-Conference Update

Last year's conference was held on October 2019 in Loveland, Colorado and featured:

- 400+ people attended. Of note, 20 students from Colorado State University attended a full day of the conference.
- 20+ state associations, including YOWA, were represented;
- 35 companies and associations exhibited;
- 60 technical sessions were offered; and
- Two field trips were offered (30 attendees participated)

This year's event will be held October 25-28, 2020 at the Hampton Roads Convention Center in Hampton, VA. A "Call for Papers" has been sent out and abstracts are due May 15th.

The conference will be sponsored by NOWRA, the Virginia Onsite Wastewater Recycling Association (VOWRA), National Association

NOWRA News

Government Relations

NOWRA's 2020 Fly-In event, in which leaders in our industry visit Washington D.C. and meet personally with elected officials and their staffs to forward our industry's interests, was originally scheduled for May 13, 2020.

Unfortunately, this has been cancelled due to the pandemic. No decisions have been made to reschedule this event at this time.

Legislation

Senator Booker (D-NJ) has introduced legislation which would require EPA to provide funding to establish a grant/loan program to repair/replace failing septic systems for low-and middle-income households. Like the USDA Well & Septic Program, the legislation would make EPA set up a fund that would issue grants to qualified nonprofits to lend to homeowners for repair/replacement of malfunctioning septic systems. The bill has bipartisan support in both the House and the Senate. Senator Booker's goal is to have his legislation rolled into the 2020 Water Resources Development Act (WRDA) legislation.

of Wastewater Technicians (NAWT), and the State Onsite Regulators Association (SORA). It will once again feature 5-6 concurrent education tracks, a general session, expo hall, field trips, social events, and outstanding networking with colleagues from around the country.

Also, this year's conference opportunities will feature two new elements:

- A research symposium will be held all day on Wednesday, Oct 28th. The goal of the symposium is to bring together members of the research community to identify, define and prioritize research needs within the industry. A peer-reviewed white paper will be developed following the conference which documents the recommendations of the symposium.
- NAWT and VOWRA are also planning a separate training and certification track on real estate home inspections. Virginia recently passed a law requiring home inspectors who inspect septic systems to be certified as a system inspector, with criminal penalties for failure to comply.

Make your plans to attend the Mega-Conference in Hampton, Virginia. You will not regret it!

NOWRA Online Training

The end of 2019 and early 2020 has continued to provide YOWA members with valuable online training opportunities for TCH credit for their Massachusetts Wastewater Operator license or Title 5 certification. Although the number of courses taken was not as large as spring/summer 2019 when the majority of Massachusetts Title 5 professionals renewed, there was a steady stream of course takers. MA Wastewater Operators needed to obtain 20 hours of training by December 31, 2019 in order to maintain their license. Title 5 professionals need to obtain 10 hours over their 3-year renewal period - which varies depending on when you were first approved.

YOWA provided a great training opportunity for those renewing by partnering with the NOWRA in offering the online training course "NOWRA's A to Z Overview of Onsite Systems," which is good for up to 8 hours of training contact hours. The course can also be broken down into 1, 3, and 4-hour modules for those that do not need the full 8-hours.

NEW: NOWRA's Installer training program has been approved in Massachusetts, Maine, and New Hampshire for 8 hours of training credits. The course is broken up into eight 1-hour modules covering Safety, Distribution, Controls, Advanced Treatment, Soil Treatment, etc.

Online training is a great way to get your renewal hours at your own pace and time. And now with the current COVID-19 pandemic situation, face to face training is not available leaving many professionals scrambling to find training hours.

The Senate Environment & Public Works Committee has included language from the NOWRA Act in their version of the 2020 WRDA bill. This language, which was left off the 2018 WRDA bill, would require communities with a population under 2,500 to self-certify that they have looked at all wastewater alternatives before making an infrastructure decision.

Regulation

NOWRA is working with USDA as they write new rules for loans for septic systems under the newly expanded USDA Well & Septic loan/grant program. The grants will not be available for lending to septic system owners until the 2021 Federal fiscal year, which begins October 1, 2020, as the funding for FY2020 was not appropriated until December 2020, and USDA is only now writing the rules for dissemination of funds for septic system loans. NOWRA will work to both identify all new lenders and to make sure that NOWRA's members have points of contact for initiating the lending process for their customers.

YOWA members also enjoy a discount on NOWRA training courses while the association benefits by receiving a small percentage of the registration fee. YOWA also assists NOWRA with seeking state approval for the training programs, so it's a win-win proposition.

Thank you for supporting YOWA/NOWRA. Our goal is to expand the training offerings for our membership. If you have any suggested topics, please contact us at yankeeonsite@gmail.com.

[View current courses being offered >>](#)

Watch for additional courses to be released by NOWRA this year!

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