

# 36<sup>th</sup> ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

REGISTER TODAY!

Seating is limited, so don't miss out on this one-stop continuing education opportunity. Earn your contact hours during this second year of the current two-year renewal cycle!

Join us for New England's largest event dedicated to the onsite wastewater industry!

## March 31–April 1, 2025

DoubleTree by Hilton Manchester Downtown, Manchester, NH

Thank you to our Gold Member Sponsors:



## The Industry Event of the Year

Our two-day conference is THE industry event of the year.

**Register in advance by March 16, 2025** and avoid a \$50 late registration fee! [Click here to register online](#) or follow the link provided on the home page of [gsowa.org](http://gsowa.org).

### HAVE QUESTIONS?

Call us at (603) 228-1231 or email us at [info@gsowa.org](mailto:info@gsowa.org).

## Continuing Education Approvals

Approved:

- N.H. Permitted Designers and Installers (*Up to 6 continuing education credit hours each day, based on number of sessions attended and applicability to your state permit or license type.*)

Approval is pending for the following:

- N.H. Licensed Septic System Evaluators (*Up to 6 CEU hours each day*)
- Vermont Class A and Class B Licensed Designers (*5 credits each day*)
- Maine Site Evaluators, Certified System Installers, and Certified System Inspectors (*6 contact hours each day*)
- Massachusetts (NEIWPC) Soil Evaluators and System Inspectors (*5.0 TCHs daily for lectures/5.25 total for expo*)

NH Certified Wetland/Soil Scientists:

Per March 2011 changes to the administrative rules of the NH Joint Board, the board does not pre-approve programs. As a CWS/CSS, you are to determine the applicability of a particular hour(s) of session time to the practice of wetland or soil science.

## Certificates

All designers and installers will receive a daily credit form which you must keep with you throughout the day. During each session, you will be required to sign in and at the end of each session attended, you must get a stamp or sticker on your form for the session. GSOWA session room host(s) will distribute them at the end of each session. If you do

not attend the full session, you will not receive a sticker or stamp. It will be your responsibility to safeguard your form(s) by making a copy after the event. GSOWA will be unable to provide replacement copies. Total credits earned are based on those eligible sessions you attend and for which you receive a stamp/sticker. You will provide those to the state when submitting your renewal.

**If your CEU certificate for March 31 is submitted by the end of the day and you pay the additional fee, these credits will count toward your 2024 renewal year.**

## Parking at the DoubleTree by Hilton Manchester Downtown



A lower "event" rate of \$7 (for up to 8 hours) will be extended to all who use the Granite Street garage connected to the hotel. Bring your parking ticket to the GSOWA registration desk to validate it to receive the event rate! Oversized vehicles may not fit in the garage.

**Why not consider carpooling?**

## Thank you!

Conference badge lanyards sponsored by Eljen Corporation



Tote-bags sponsored by EJ Prescott, Inc.





# 36<sup>th</sup> ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

MONDAY, MARCH 31, 2025

**8:00 AM**

**Check-In & Continental Breakfast with Exhibitors**



**8:45–9:00 AM**

**GSOWA Annual Meeting & Election of Officers & Directors**



**Conference Welcome & Announcements**

*Chris Albert, Chairman, GSOWA, CSA Environmental Consultants, LLC*

**9:00–10:00 AM OPENING GENERAL SESSION**

**Aerobic Treatment: Creating a Happy Home for the Microbes that Renovate Wastewater**

*John R. Buchanan, Ph.D., P.E., University of Tennessee*

In order to convert wastewater back to water, we must remove the wastes. Bacteria and other microorganisms assist with this process by oxidizing organic carbon, solubilizing many of the suspended solids, and by transforming nitrogen compounds. Aerobic treatment systems optimize this natural process by providing plenty of dissolved oxygen, warmth, and the removal of accumulated biosolids. This presentation will focus on how aerobic treatment systems work (on a microbial level), and how they should be maintained so that the bacteria will continue to perform as expected.

**10:00–10:45 AM BREAK WITH EXHIBITORS**

**10:45–11:45 AM BREAKOUT SESSIONS I**

**A. From Blueprint to an Approved Plan**

*F. Bruce Fillmore, Septic Assistant, LLC*

This presentation will go over typical plan and title block setups preparation using the CAD environment for NH-DES submissions. Professional plan layout and presentations, utilizing CAD utilities and taking advantage of CAD abilities including utilizing layers, blocks, dynamic blocks, block attributes, standard text, dimension styles and more will be discussed.

**B. Optimizing Your Heavy Equipment for Working Smarter, Not Harder, on the Jobsite**

*TBD, Milton CAT*

We will take a look at how to make the best use of your onsite equipment to install a quality system, properly stage your machines and save time. Matters of routine maintenance will also be included.

**C. Ins & Outs of Water Well Construction near Septic Systems**

*Abby Thompson Fopiano, P.G., Edgewater Strategies*

This session that will provide an in-depth look at the intersection of septic system design and water well regulations. What are the homeowners, designers and well drillers responsibilities on complex sites? The NH Water Well Board enforces well setback distances to ensure that wells are not placed too close to sources of contamination. Learn about how different types of wells are constructed and the options for special methods of construction, including extra casing using the Pythagorean Theorem, that must be used when well setbacks cannot be met.

**D. Tips for the Installer Test – Day One**

*Gary Spaulding, Advanced Onsite Solutions, LLC*

The NHDES Installers Exam preparation will be divided into two breakout sessions. These sessions are designed to provide a broad overview of the rules and include sample questions that may appear on the exam, helping individuals identify areas they need to focus on for success.

Candidates should plan to dedicate significant time to independent study or seek additional assistance to thoroughly prepare for the exam. This is not an exam that can be passed without a comprehensive understanding of the rules and installation requirements.

**1. General Site and Administrative Rules**

Overview of ISDS installation knowledge as covered in the NHDES Env-Wq 1000 rules and NH RSA 485-A.

**2. Tanks, Sewer, and Effluent Pipe**

Focus on the installation of sewer pipes, septic tanks, and effluent pipes, with an emphasis on Env-Wq 1009, Env-Wq 1010, Env-Wq 1012, and Env-Wq 1013 rules.

**3. Effluent Disposal Areas (EDAs)**

Review of installation requirements for EDAs, with a focus on Env-Wq 1014-1021.

\*limited space available

**MONDAY, MARCH 31, 2025 (CONTINUED)**

**11:45 AM–1:00 PM  
 BUFFET LUNCH WITH  
 EXHIBITORS**



**1:00–2:00 PM BREAKOUT SESSIONS II**

**A. The Nitrogen Cycle – How to Reduce**

*Christopher Albert, CSS and CWS, CSA Environmental*

The presentation will review water usage, the history of onsite septic systems, and the design of advanced treatment systems and the Nitrogen Cycle.

**B. Septic Systems, Wastewater Treatment Facilities (WWTFs) & Municipal Responsibility**

*Wade Pelham, Residuals Coordinator, NHDES Residuals Management Section*

This presentation will provide an overview of septage management in the state of New Hampshire.

**C. Roundtable Discussion – Facilitated Discussions of Challenges within Each Industry Sector**

At times Designers are frustrated with Installers and just as many times Installers are frustrated with Designers. This free-flowing discussion will allow all to talk about what works and what doesn't work and how we can best work in harmony.

**2:00–3:00 PM GENERAL SESSION**

**Your Septic System on Drugs**

*John R. Buchanan, Ph.D., P.E., University of Tennessee*

Recently the U.S. FDA established a ban on consumer products containing triclosan, the active ingredient in most antibacterial soaps. The concern is two-fold: there is strong concern that the overuse of antibiotics will generate new antibiotic-resistant microorganisms, and there is little understanding about triclosan's fate in wastewater treatment systems. However, triclosan is not the only product of concern; if you are on a medication, so is your septic system. Oral medications have to be digested before the active ingredients can enter the bloodstream and be transported within the body. For many medications, only 20% of the active ingredient provides a clinical benefit (clearing a sinus infection or providing pain relief) while the remainder is metabolized and excreted from the body - mostly in the urine. This presentation will focus on pharmaceuticals and personal care products that enter septic systems and investigate

the difficulties of removing these compounds from the water.

**3:00–3:30 PM BREAK WITH EXHIBITORS**

**3:30–4:30 PM CLOSING GENERAL SESSION**

**2025 NHDES Subsurface Bureau Update**

*David Aiton, Compliance and Outreach; Scott Hazelton, Administrator, Subsurface Bureau, NH Department of Environmental Services*

This session will provide an overview of recent changes in the NHDES Subsurface Bureau including recently passed legislation, highlights of proposed rule revisions and additional topics related to NHDES individual sewage disposal system and subdivision applications.

**Conference Exhibitors**

(2025 Participating Exhibitors as of 2/5/25)

- |                                      |  |
|--------------------------------------|--|
| AAA Pump Service/Fay Electric Motors | New England Septic Solutions               |
| Advanced Onsite Solutions, LLC       | NHDES Subsurface Systems Bureau            |
| Beauregard Equipment                 | NH Health Officers Association             |
| Blake Equipment                      | NH Lakes                                   |
| Boufford Insurance Agency            | NOWRA                                      |
| CADNET Services, LLP                 | Pipe Connections, LLC                      |
| Champlin Associates                  | Polylok Inc.                               |
| Cooper New England/Liberty Pumps     | Pro-Source Sales                           |
| E.J. Prescott, Inc.                  | Pump Systems, Inc.                         |
| Eljen Corporation                    | R.E. Prescott Co., Inc.                    |
| F.R. Mahony & Associates             | Septic Assistant                           |
| Harmon & Co., Inc.                   | SeptiTech                                  |
| Imperial Industries                  | Shea Concrete Products, Inc.               |
| Infiltrator Water Technologies       | The Granite Group                          |
| InspectorCameras.com                 | Total Laser Care, LLC                      |
| Maine Technical Source               | Water Industries                           |
| MiltonCAT                            | William N. Lamarre Concrete Products, Inc. |
| New England Laser & Transit Co.      |  |

# 36<sup>th</sup> ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

TUESDAY, APRIL 1, 2025

**8:00 AM**

## Check-In and Continental Breakfast with Exhibitors

**8:45–9:00 AM**

## Conference Welcome & Announcements

*Chris Albert, Chairman, GSOWA, CSA Environmental Consultants, LLC*

## 9:00–10:00 AM OPENING GENERAL SESSION

### Pumps, Control Panels, and Wastewater – What Could Possibly Go Wrong

*John R. Buchanan, Ph.D., P.E., University of Tennessee*

A pressurized distribution system is the best method to ensure the uniform application of effluent along the length of a trench. Other times, we may need pressurization to move effluent from a lower-elevation septic tank to an upper-elevation soil treatment area. To pressurize effluent, we need a pump, and a pump must have controls. This session will focus on the electrical aspects of building an onsite wastewater treatment system that needs a pump and controls. Septic systems are known for their acidic gases above the waterline. The hydrogen sulfide will corrode wiring connections and destroy control panels if the system is not properly installed.

## 10:00–10:45 AM BREAK WITH EXHIBITORS

## 10:45–11:45 AM BREAKOUT SESSIONS I

### A. Tips for the Installer Test – Day 2

*Gary Spaulding, Advanced Onsite Solutions, LLC*

These sessions are designed to provide a broad overview of the rules and include sample questions that may appear on the exam, helping individuals identify areas they need to focus on for success.

Candidates should plan to dedicate significant time to independent study or seek additional assistance to thoroughly prepare for the exam. This is not an exam that can be passed without a comprehensive understanding of the rules and installation requirements.

#### 1. Relating Swing-Ties to ISDS Profiles

Understanding the relationship between swing-tie locations typically shown on plan views and their correct placement on EDA profiles.

Breakfast sponsored by



#### 2. Calculating ISDS Elevation Changes

Calculating elevation changes for ISDS components due to changes in horizontal location.

#### 3. EDA Layout from Swing-Ties

Laying out the corners of an EDA using a provided table of swing-ties.

#### 4. Understanding Design Intent

Interpreting the design intent of an EDA from a plan showing contours or spot grades.

#### 5. Labeling Topographic Features

Identifying and labeling topographic features on a site plan.

#### 6. Reading and Scaling from a Plan

Using a scale to ensure ISDS setback distances are met, verifying EDA tie points, and checking bed size.

#### 7. Amended vs. New Plan Review Requirements

Understanding when an amended plan is sufficient or when a new construction approval is required before an inspection can be completed.

\*limited space available

## B. CDL Licensing Updates and Equipment Securement

*Roy T. Roberts, Roy T. Roberts Consulting Group, LLC*

This session is intended for installer and septage haulers who own and operate heavy equipment that requires drivers to hold a CDL. Roy will offer updates to Federal and State laws and rules for CDL license holders and offer reminders about important inspections and renewals of CDL licenses. How does a driver get a CDL in NH in 2024? Do you know what the FMCAS and your on-line CSA scoring is? Yours are available to customers and competitors. Does your safety management plan keep you in compliance? Learn this and more and ask your own questions.

## C. Protecting New Hampshire's Lakes: How Waterfront Property Sales and Septic System Upgrades Matter

*Kat Kelleher, Conservation Program Coordinator and Brea Arvidson, Director of Programs, NH LAKES and Kevin Kent, Kent Clean Septic*

Learn about recent changes to septic system regulations for waterfront property sales in New Hampshire and how these updates help protect lake water quality. The session will cover key requirements for onsite wastewater treatment systems (OWTS) on sold waterfront properties and how septic professionals can guide property owners through the process. Additionally, attendees will gain insights into NH LAKES' LakeSmart Program, which promotes lake-friendly living practices, including septic system upgrades, to help protect New Hampshire's lakes.

**TUESDAY, APRIL 1, 2025 (CONTINUED)**

**11:45 AM–1:00 PM BUFFET LUNCH WITH EXHIBITORS**

**1:00–2:00 PM BREAKOUT SESSIONS II**

**A. Basics of Soil Morphology**

*Christopher Albert, CSS and CWS, CSA Environmental*

Soil Morphology is the study of physical properties of horizons, color, texture, consistency and structure. This session will cover factors all designers should know when conducting site work for developing a septic design. The session will cover soil properties, the proper way to document soil profiles, the interpretation of the soil properties and the classification of the soil profiles.

**B. System Failure Identification**

*Eric Daniels, Eljen Corporation*

This presentation delves into the critical aspects of identifying and diagnosing failures in septic drainfield systems within the onsite wastewater industry. It is designed for professionals, regulators, and technicians who are responsible for maintaining, evaluating, and troubleshooting septic systems to ensure environmental safety and compliance.

We will cover common causes of system failure, including improper design, installation errors, soil incompatibility, and long-term maintenance issues. Through real-world examples, case studies, and step-by-step guidance, participants will gain practical insights to prevent system failures, extend the lifespan of septic systems, and protect public health and the environment.

**C. Excavation Safety & OSHA Compliance**

*Bob Moody, EJ Prescott*

This session will cover Excavation safety and the OSHA regulations covering them. We will discuss real life situations and how to prevent injuries and avoid Regulatory issues. Proper use of trench boxes, sloping, and ladder safety will also be discussed.

**2:00–3:00 PM BREAKOUT SESSIONS III**

**A. Fats, Oils and Grease and Environmental Protection**

*Wade Pelham, Residuals Coordinator, NHDES Residuals Management Section*

During this session, system professionals will learn about the proper design, installation, and maintenance of grease interceptors and their role in protecting water quality.

**B. NHDES Wetlands Rules Update**

*Darlene Forst, Wetlands Bureau Administrator, NH Department of Environmental Services*

In this session the Wetlands Bureau will present an update on the current and proposed rules and rewrites. Darlene will discuss what the driving factors are, proposed improvements and the process leading to rule adoption.

**C. Identifying Issues with Boundary Lines and Wetlands and Responsibilities to the Owner**

*Christopher Albert, CSS and CWS, CSA Environmental and Eric Salovitch, Northam Survey LLC*

This presentation will focus on how and when a septic designer should reach out for assistance in Boundary and Wetland issues and contracts with clients. Will also focus on the installer and when site conditions differ from the plan.

**3:00–3:15 PM BREAK WITH EXHIBITORS**

**3:15–4:15 PM CLOSING GENERAL SESSION**

**NHDES Subsurface Bureau Inspections**

*Benjamin Bean, Construction Inspection Supervisor and Dale McConkey, Land Resources Management Specialist, Subsurface Systems Bureau, NH Department of Environmental Services*

This presentation will provide an overview of field inspections - what Regional Field Inspection Staff are checking and expectations for preparation of ISDS components at time of inspection request, including examples of what has been observed on site.

## Online registration is available!

Visit [GSOWA.org](http://GSOWA.org) and click on the registration link on our home page.

# 36<sup>th</sup> ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

DoubleTree by Hilton Manchester Downtown

**MONDAY, MARCH 31 & TUESDAY, APRIL 1, 2025**

Company/Town/Agency Affiliation: \_\_\_\_\_

Business Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

GSOWA Member? (yes/no) \_\_\_\_\_ Employees and spouses of members can register at the member rate if the member registers at the same time.

To register online (via credit card or check), click [here](#). Please alert us to any dietary restrictions or ADA requirements.

Attendee Name: \_\_\_\_\_

Monday & Tuesday Program     Monday Program ONLY     Tuesday Program ONLY  
 Designer # \_\_\_\_\_     Installer# \_\_\_\_\_     Pumper     Evaluator

Attendee Name: \_\_\_\_\_

Monday & Tuesday Program     Monday Program ONLY     Tuesday Program ONLY  
 Designer # \_\_\_\_\_     Installer# \_\_\_\_\_     Pumper     Evaluator

Attendee Name: \_\_\_\_\_

Monday & Tuesday Program     Monday Program ONLY     Tuesday Program ONLY  
 Designer # \_\_\_\_\_     Installer# \_\_\_\_\_     Pumper     Evaluator

### Registration Fees (per person)

Two-Day Program:	\$255 Member rate	\$360 Non-Member Rate
Monday ONLY:	\$170 Member rate	\$260 Non-Member Rate
Tuesday ONLY:	\$170 Member rate	\$260 Non-Member Rate

**Register in Advance by March 16 to Avoid Higher Rates!**

Walk-in registrations and those who register after this date will incur an additional processing fee of \$50 per person.

Any registration changes made after March 16 are subject to a \$25 administrative fee.

Total Amount: \$ \_\_\_\_\_

Please make checks payable to: GSOWA or charge my VISA / Mastercard (American Express not accepted)

Card Number: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ CVW # \_\_\_\_\_

Name on Card: \_\_\_\_\_

Mailing Address if different than above: \_\_\_\_\_

Cancellation Policy: Advance registration by March 16, 2025 is importation to ensure adequate accommodations. Cancellations made on or before March 16, 2025 will qualify for a refund minus a \$25 administrative fee. No refunds will be offered after that date as commitments have been made to the hotel.

Walk-in registrations and those who register after March 16, 2025 will incur an additional processing fee of \$50.

Return by mail to: GSOWA, 17 Depot Street, Suite 3, Concord, NH 03301





17 Depot Street, Suite 3, Concord, NH 03301

Return Service Requested

# 36<sup>th</sup> ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

Monday, March 31 & Tuesday, April 1, 2025

DoubleTree by Hilton Manchester Downtown  
700 Elm Street, Manchester, NH

Visit [GSOWA.org](https://www.gsowa.org) and click on the registration link on our home page.

## Overnight Accommodations:

A limited block of rooms are available at DoubleTree by Hilton Manchester Downtown at the GSOWA rate of \$164 single/double plus tax per night. Call the hotel at 603-625-1000 and ask for group code **GSO** or book online using the link or the QR code: <https://www.hilton.com/GSOWA25>

The room reservation cut-off date is Sunday, **March 9, 2025**.



**SCAN TO BOOK A ROOM**