



Tentative Program

- DESIGNERS
- PUMPERS
- INSTALLERS
- EVALUATORS

Seating is limited, so don't miss out on this one-stop continuing education opportunity.

REGISTER TODAY!



32nd ANNUAL SPRING SEPTIC SYSTEM CONFERENCE & EXPO

Monday, March 25 & Tuesday, March 26, 2019

Doubletree by Hilton Manchester Downtown, Manchester, NH

Our two-day conference is **THE** industry event of the year and is approved by NHDES for six (6) continuing education contact hours for each day of attendance or a total of twelve (12) if attending both days.

Get a jump on your continuing education requirements for the 2019 - 2021 renewal period by registering for both days.

Register in advance by March 15, 2019 and avoid a \$40 late registration fee!

Click [here](#) to register online or follow the link provided on the home page of **gsdia.org**.

HAVE QUESTIONS?

Call us at (603) 228-1231 or email us at info@gsdia.org.



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CONTINUING EDUCATION APPROVALS

Six (6) NHDES Continuing Education Contact Hours per day for N.H. Permitted Designers and Installers

GSDI has applied for approval of this program for permits or licenses held by the following professionals. We will update our website as approvals are granted or confirmed.

N.H. Licensed Septic System Evaluators

Vermont Class A and Class B Licensed Designers

Maine Site Evaluators, Certified System Installers, and Certified System Inspectors

Massachusetts (NEIWPC) Soil Evaluators and System Inspectors

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

Daily sign in and sign out will be required.

Certificates for those who attend will be distributed at the end of the entire program each day. Only those individuals who "sign in" at registration in the morning and again at check out will receive a certificate. We will not make any different accommodations for individuals to receive their certificates, so plan your travel schedule accordingly. If an individual misplaces his or her certificate after the event and requests a duplicate be sent or emailed, the charge will be \$10.00. It is your responsibility to safeguard your certificates.



Parking at the Doubletree by Hilton Manchester Downtown

A lower "event" rate of \$6 (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 GSDI registration desk to validate it to receive the event rate! A map of other parking options will be posted on our website before the conference and a link to the map will be emailed to all participants with email.

Why not consider carpooling?



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MONDAY, MARCH 25, 2019

8:00 AM Check-in and Exhibit Hall Opens with Continental Breakfast

8:45-9:00 AM GSDI Annual Meeting & Election of Officers and Directors

Conference Welcome, Introductions, and Announcements
Carl Hagstrom, Conference Committee Chairman,
Monadnock Septic Design, LLC

9:00-10:00 AM Opening General Session

Durability of Precast Concrete Wastewater Structures

Kayla Hanson, Director of Technical Services, National Precast Concrete Association

During this session, Kayla will go into some precast tank manufacturing details and talk about what makes a durable tank. From materials testing to mix design to casting to curing and installation, she will discuss key elements of durability along the way. She will also discuss coatings and other additives/admixtures designed to prolong durability.

10:00-10:45 AM Break with Exhibitors

10:45 - 11:45 AM Breakout Session 1

Heavy Equipment Support and Maintenance

Derek Hartshorn, Sales Representative, Beauregard Equipment

During this session, learn how to get the most from your equipment as you construct a septic system. This session will focus on the importance of properly maintaining your equipment for both peak performance and longevity. Protecting your investment and troubleshooting coming issues will be covered.

- OR -

Pumps: Sizing, Troubleshooting

Jeff Rook, Market Development Manager-Wastewater, Goulds Water Technology

This session will address a variety of pump system design considerations, installation challenges and how to

troubleshoot the pump control panel.

- OR -

Anerobic vs. Aerobic System

Dr. Sara Heger, Research Engineer and Instructor, University of Minnesota Onsite Sewage Treatment Program

Within most septic systems, both anaerobic and aerobic processes are used to treat the wastewater. This presentation will describe each oxygen state, discuss where each method is dominant and present a methodology to evaluate systems to determine if both processes are working properly.

11:45 AM - 1:00 PM Buffet Lunch with Exhibitors

Enjoy a great hot lunch, visit with exhibitors, and participate in vendor prize drawings.

1:00 - 2:00 PM General Session

Compaction - The Enemy of System Longevity

Dr. Sara Heger, Research Engineer and Instructor, University of Minnesota Onsite Sewage Treatment Program

Humans along with all our activities cause widespread soil compaction. Compaction constrains oxygen (O₂) movement in the soil and shifts soil toward anaerobic conditions. Less O₂ diffusion into the soil leads to a chemically reducing soil environment. Compaction leads to smaller pore spaces and slower infiltration rates. This presentation discusses the causes of compaction including wet soils, material handling and the weight of vehicles/equipment, pedestrians, and animals. It will then focus on avoidance methods and potential solutions for sites that have been compacted.

2:00 - 3:00 PM Breakout Session 2

Best Practices from the Field - Avoiding Mistakes Up Front Can Help You Later

Russell Lanoie, Rural Home Technology

Learn from one of NH's experienced state-permitted septic system designer/installers (and longtime GSDI member) who has been called on by many in the North Country to come up with creative solutions for designing, installing and maintaining septic systems in some of NH's most challenging conditions. He will draw from his experience working on and troubleshooting both single-family residential systems and



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MONDAY, MARCH 25, 2019 CONTINUED

far more complex larger systems for ski communities and other large commercial and condominium locations.

- OR -

Watertightness of Precast Concrete Wastewater Structures

Kayla Hanson, Director of Technical Services, National Precast Concrete Association

During this session, Kayla will examine what makes a concrete structure watertight. She will discuss concrete, pipe penetrations, joint sealants, and risers. She will talk about additional admixtures and sealants that can be used and briefly cover ways of testing for watertightness. A discussion of what NH's Env-1,000 Eqv. Rules have to say about sealing tanks will be included.

- OR -

CDL Update and Rules of the Road

Trooper Scott Atherton, NH State Police

Though he often suggests that he does not have all that much to offer, each year officers from the NH State Police CDL unit never leave without a long line of our attendees looking to get their questions and concerns about licensing and vehicle inspections answered. Trooper Atherton will offer an update on changes to both state and federal regulations and then open the floor to your questions.

3:00 - 3:30 PM Refreshment Break with Exhibitors

Enjoy a quick break with exhibitors.

3:30 - 4:30 PM Closing General Session

NHDES SSB Program Update and Inspector Panel Discussion

Rob Tardif, Administrator, NHDES Subsurface Systems Bureau and Inspectors

Get an update from NHDES Subsurface Systems Bureau Administrator, Rob Tardif and then hear from a panel of state inspectors as they discuss observations from the field and how to make sure things on the job site will be ready for your final approval to backfill. Time will be allowed for questions.

Conference Exhibitors (As of February 12, 2019)

- AAA Pump Service, Inc.
- Advanced Onsite Solutions, LLC
- A.J. Foss
- Arrow Central
- Blake Equipment Co.
- Bryant's Pipe Connections
- CADNET Services, LLP
- Clear Water Industries
- Eastcom Associates
- Eastpoint Lasers, LLC
- Eljen Corporation
- F.R. Mahony & Associates, Inc.
- Fuji Clean USA
- F.W. Webb Co.
- Goulds Water Technology
- J & R Sales and Service, Inc.
- Liberty Pumps, Inc.
- Maine Technical Source, Inc.
- National Precast Concrete Association
- New England Laser & Transit Co.
- NHDES Residuals Management
- NHDES Subsurface Systems Bureau
- Orenco
- Pepin Precast
- Polylok, Inc.
- The Powderhorn Agency
- Presby Environmental, Inc.
- R.E. Prescott Co., Inc.
- Scherbon Consolidated, Inc.
- Septic Preservation Services
- SeptiTech
- Shea Concrete Products, Inc.
- Soleno
- The Dirty Bird
- Water Industries, Inc.
- William N. Lamarre Concrete Products, Inc.



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TUESDAY, MARCH 26, 2019

8:00 AM Check-in and Exhibit Hall Opens with Continental Breakfast

8:45-9:00 AM Welcome and Announcements

Carl Hagstrom, Conference Committee Chairman, Monadnock Septic Design, LLC, Fitzwilliam, NH

9:00-10:00 AM Opening Session

Changing Water Use

Dr. Sara Heger, Research Engineer and Instructor, University of Minnesota Onsite Sewage Treatment Program

This presentation will focus on a study funded by the Water Research Foundation evaluating water use from over 23 utilities and over 1,000 homes showing a 23% reduction in water use since 1999. The primary sources for the reduction will be discussed along with implications with increased concentrations. Septic system design and operation considerations will be highlighted.

10:00-10:45 AM Break with Exhibitors

10:45 - 11:45 AM Breakout Session 1

Working Within the Shoreland Boundary

Jay Aube, Shoreland Program Outreach Coordinator, NHDES Land Resource Management Program

During this session, Jay will discuss how best to work within the shoreland boundary and remain in compliance with current rules. He has been asked to touch upon some of the common violations and consequences to contractors and the homeowners they are working for. He will also include discussion of having proper erosion control technology and practices in place during the construction period.

- OR -

Installer's 101 - Part I

Jim Hanna, J.D. Hanna Excavating and Others

As part one of a three-part series, this session will walk participants through the basics of how to approach a system installation from the time of first site visit to setting the tank in place. It will cover starting with plans, design intent, sill height, getting through the house foundation, septic tank location, excavating for and setting the tank, backfill piping to

septic tank/side entry, compartments, tank waterproofing, baffle installation, risers and covers and future locating.

- OR -

Ethics for the Land Use Professional - Part I

John Doran, John Doran & Associates

This two part session will help those in need of fulfilling continuing education requirements in Ethics. This program will focus on ethics for those working in the land use professions including NH Certified Wetland and Soil Scientists. This program is applicable the two-hours of training in professional ethics required by the NH Board of Natural Scientists. Pre-registration is required for this class.

11:45 AM - 1:00 PM Buffet Lunch with Exhibitors

Enjoy a great hot lunch, visit with exhibitors, and participate in vendor prize drawings.

1:00 - 2:00 PM Breakout Session 2

The Use of Inspection Cameras for Septic System Troubleshooting & Evaluations

Eric Denslow, Eastcom and Keith Morin, Pierpoint Inspection Systems

This session will cover the advantages of using an inspection camera to assess the condition of a septic system from the inside and the recent advancements in the technology. We will cover visual inspection advantages, the ability to locate the camera and problems inside the pipes from above ground, the ability to take high definition recording and still images and the ability to take notes directly on the video and generate detailed reports explaining what was found during the camera inspection.

- OR -

Installer's 101 - Part II

Jim Hanna, J.D. Hanna Excavating and Others

Part two of our series focuses on the EDA (effluent disposal area) and will address leachfield area preparation, fill material placement, component placement, piping in the field, distribution box placement and piping from the septic tank to the box and piping from the box to the field.

- OR -



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TUESDAY, MARCH 26, 2019 CONTINUED

Ethics for the Land Use Professional - Part II

John Doran, John Doran & Associates

Continuation of the Ethics program which began at 10:45 a.m. Pre-registration is required for this class and you must attend Part I.

2:00 - 3:00 PM Breakout Session 3

Annual NH DigSafe Law and the Enforcement Process Update

William Ruoff, Utility Analyst, NH PUC (and NH Dig Safe Program)

This important session is for both designers and installers as they conduct field work and excavation work which could put them at risk of making contact with underground utilities. Buried public utilities can turn up in some of the most unexpected places. Keeping yourself and your crew safe while also preventing costly damage and service interruptions is part of the message of this session. Bill Ruoff will address what the laws are here in NH and how they are enforced.

- OR -

Installer's 101 - Part III

Jim Hanna, J.D. Hanna Excavating and Others

Session three will cover venting and insulation considerations, pump installation matters, working with state inspectors and completing the backfill of the EDA, septic tank and piping.

- OR -

Guacamole, Gravy, Ice Cream and Your Gravity Grease Interceptor

Ray Gordon, Supervisor, NHDES Residuals Management Section

People love guacamole, gravy and ice cream but these type of foods can have a negative impact on your septic tank. Learn how to protect commercial systems from these delicious foods by installing a Gravity Grease Interceptor. This presentation will go over how a Gravity Grease Interceptors protects the septic tank, the essential regulations (Found in Env_Wq 1000) that any designer or installer should know before designing or installing a system and how to know when it is time to pump a Gravity Grease Interceptor. The

knowledge you gain can help your neighborhood prepare all the Guacamole, Gravy, and Ice Cream that you can eat without worrying about a septic system failure.

3:00 - 3:20 PM Afternoon Refreshment Break

3:20 - 4:20 PM Closing General Session

Water Well Rules and Working in Tandem with Well Drillers

Abigail Fopiano, P.G., Water Well Program Manager, NHDES

Get to know the new person in charge of the NH Water Well Board, Abby Fopiano as she talks about the Water Well Board rules and those that specifically relate to setbacks to septic systems. She will provide case studies of sites there were difficult but that were worked out to the benefit of all concerned. Abby will also talk about well types and their construction. It is important that all related professionals working on a jobsite understand the dynamics of the whole system. She will co-present with a member of the well drilling industry here in NH.

Thank you!

All conference food & beverage and namebadge lanyards sponsored by Advanced Onsite Solutions, LLC



Conference tote bags sponsored by Kent Clean Septic Pumping & Inspections





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Online registration is available AND you can use a major credit card too!

Visit GSDIA.org and click on the registration link on our home page.

MONDAY, MARCH 25 & TUESDAY, MARCH 26, 2019 Doubletree by Hilton Manchester Downtown

Company/Town/Agency Affiliation: _____

Business Address: _____

City/State/Zip: _____

Email: _____ Phone: _____

GSDI 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 Tuesday Ethics Program
 Designer # _____ Installer# _____ Pumper Evaluator

Attendee Name: _____

Monday & Tuesday Program Monday Program ONLY Tuesday Program ONLY Tuesday Ethics Program
 Designer # _____ Installer# _____ Pumper Evaluator

Attendee Name: _____

Monday & Tuesday Program Monday Program ONLY Tuesday Program ONLY Tuesday Ethics Program
 Designer # _____ Installer# _____ Pumper Evaluator

Registration Fees (per person)

Two-Day Program:	\$150 Member rate	\$180 Non-Member Rate
Monday ONLY:	\$100 Member rate	\$130 Non-Member Rate
Tuesday ONLY:	\$100 Member rate	\$130 Non-Member Rate

Register in Advance by March 15 to Avoid Higher On-Site Rates! Walk-in registrations will incur an additional on-site processing fee of \$40 per person.

Any registration changes made after March 15 are subject to a \$25 administrative fee.

Total Amount: \$ _____

Please make checks payable to: GSDI or charge my VISA / Mastercard / American Express

Card Number: _____ Exp. Date: _____ CVV # _____

Name on Card: _____

Mailing Address if different than above: _____

Cancellation Policy: Advance registrations are important to ensure adequate accommodations.

Cancellations made on or before March 15, 2019 will qualify for a full refund. No refunds will be offered after that date as commitments have been made to the hotel.

Return by mail to: GSDI, 53 Regional Drive, Suite 1, Concord, NH 03301 or return by fax to: (603) 228-2118



Granite State Designers and Installers Association

53 Regional Drive, Concord, NH 03301

Return Service Requested

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Monday, March 25 & Tuesday, March 26, 2019

Doubletree by Hilton Manchester Downtown, Manchester, NH

Visit GSDIA.org and click on the registration link on our home page.

Overnight Accommodations: Need a hotel guestroom? A limited block of rooms are available at Doubletree by Hilton Manchester Downtown at the GSDI rate of \$139 plus tax per night. Call 603-625-1000 and ask for the GSDI rate or go online at: <http://group.doubletree.com/GraniteStateDesign>. The room reservation cut-off date is Sunday, March 3, 2019.