

# ONSITE<sub>journal</sub>

Winter 2008

NEWS FOR THE DECENTRALIZED WASTEWATER INDUSTRY

Vol. 17 No. 1



**Featuring this Month:**

- **Installer Academy Recap**
- **Water Softener/Septic System Questions**
- **The Bold Statement**

*Roe-D-Hoe  
first place  
winner  
Bill Morton*

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National Onsite Wastewater  
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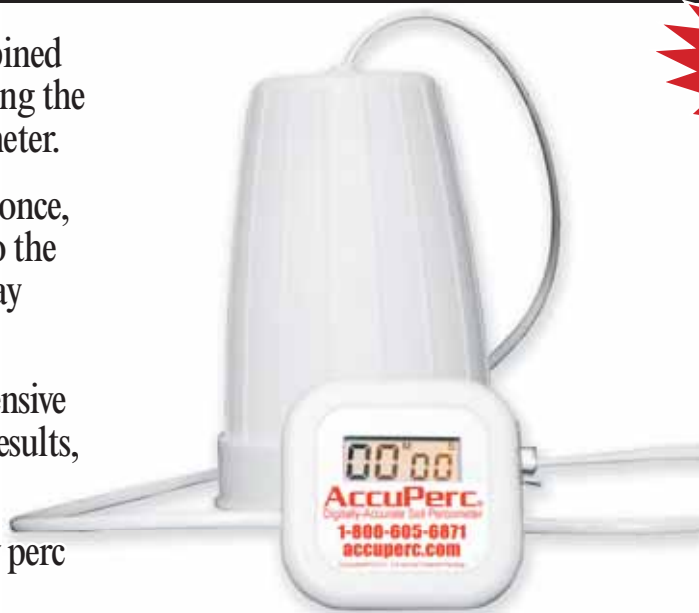
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**Netafim USA**  
**Premier Tech Environmental**  
**Ring Industrial Group, LP**  
**Xerxes Corporation**  
**Zoeller Pump Company**



## **Silver**

**Aquapoint, Inc.**  
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## **Bronze**

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**Presby Environmental, Inc.**  
**Waterloo Biofilters Systems, Inc.**



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**Gast Manufacturing**



# ONSITE<sup>®</sup> journal

Winter 2008

## NEWS FOR THE DECENTRALIZED WASTEWATER INDUSTRY

National Onsite Wastewater Recycling Association, Inc.

Vol. 17, No. 1

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**A**s the people of the world learn to value water and invest in its future, the shift toward an integrated water resource management framework will become a necessity to insure the availability of “Water for All Life.”

NOWRA, with its diverse partners, is one of the leaders in the field of decentralized/distributed water. It must realize the importance of its position. NOWRA needs to use its diverse membership’s understanding and knowledge of the aspects of water to begin to break down barriers and help to make a paradigm shift from the ageing centralized water, storm, and sewer systems to the new decentralized/distributed systems.

Now is the time to take action. The centralized systems are in need of repair, and the cost of that repair will be billions of dollars. In many cases, it will be a wise decision to start making the change now to decentralized/distributed systems, rather than spending money to repair systems that are not ecologically sustainable.

It will be a daunting task because of the institutional barriers that are in place—universities that teach big-pipe theory, governmental regulations, funding, and public-utility management, are just a few. It is a task that must be addressed by many different sectors—researchers, entrepreneurs, engineers, public and private entities, and environmental activist groups. No one group will make it happen alone. We will need to work together.

At its 2007 Baltimore International Conference, NOWRA brought together a diverse group of people from around the world at a *Water for All Life* meeting. They discussed the issues involved in attaining a paradigm shift in attitudes and actions. At the end of the meeting, some of the presenters and others were asked to stay for a two-day workshop titled “Long Range Planning for Decentralized Wastewater and Storm Water Treatment Research,” sponsored by Water Environment Research Foundation (WERF). A report on the deliberations will be published by WERF, but at the workshop’s conclusion, its members issued their manifesto:

***Baltimore Charter for Sustainable Water Systems:*** *Water is at the heart of all life. In the past, we built water and wastewater infrastructure to protect ourselves from diseases, floods, and droughts. Now we see that fundamental life systems are in danger of collapsing from the disruptions and stresses caused by this infrastructure.*

*New and evolving water technologies and institutions that mimic and work with nature will restore our human and natural ecology across lots, neighborhoods, cities, and watersheds. We need to work together in our homes, our*

*communities, our workplaces, and our governments to seize the opportunities to put these new designs in place.*

*Our group of scientists, engineers, environmentalists, government officials, manufacturers, and members of the private sector are part of the solution. We have both the opportunity and obligation to participate with others on this task of transforming how we think and act in relation to water.*

*We commit to implementing more sustainable water systems by expanding uses and opening new markets for small-scale treatment processes, advancing research on micro-biological and macro-ecological scales, inventing new technologies based on nature’s lessons, creating new management and financial institutions, reforming government policies and regulations, and elevating water literacy and appreciation in the public.*

NOWRA now needs to press forward in its leadership role. It must pull together the necessary groups in the spirit of the Baltimore Charter as the next step in bringing to fruition the paradigm shift to sustainable water systems of the future. ■

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# NOWRA Board of Directors' Comings and Goings

The Executive Committee, the NOWRA Board, and President Jerry Stonebridge would like to thank the outgoing NOWRA Board Members for all of their inspiration and hard work over the last three years:

- **Sara Christopherson**

*Representative of the Academic/Researcher Sector and Educational Chairperson*

She made our conferences the best in the field.

- **Bob Himschoot**

*Representative of the Operator/Manager Maintenance, Service Provider Sector*

He always tried to bring us back to the reality of daily life in the trenches.

- **Dick Otis**

*Representative of the Site Evaluator/Soil Scientist, Engineer/Designer Sector*

He served multiple terms on the Board and in several capacities—as Chairperson, as Committee Member, and on the Tech Practices Committee. He also helped lead the Regulator Model Code Workshops.

- **Carl Thompson**

*Representative of the Supplier/Vendor Sector*

He chaired the State Leaders Committee. He also chaired the Government Affairs Committee, where his thoughtful comments on policy and procedures were always welcomed.

*Again, THANK YOU ALL for your time and energy!*

## And now, WELCOME to the new Board Members:

- **Ellen Vause** and **Peter Balas**, representatives of the Installer/Contractor Sector
- **Rodney Ruski**, representative of the Site Evaluator/Soil Scientist Engineering/Designer Sector
- **Judith Sim**, representative of the Academic/Researcher Sector

## 2008 NOWRA OFFICERS

**Jerry Stonebridge**, *President*

**Tom Groves**, *Vice President*

**Raymond Peat**, *Past President*

**Brian McQuestion**, *Secretary/Treasurer*

## SECTOR REPRESENTATIVES

- **Mary K. Clark** and **Rodney Ruskin**, Site Evaluator/Soil Scientist/Designer/Engineer
- **Al Schnitkey** and **Howard Wingert**, Supplier/Vendor
- **Ellen Vause** and **Peter Balas**, Installer/Contractor
- **J. R. Inman** and **Trapper Davis**, Operator/Manager/Maintenance-Service Provider
- **Mark Hooks** and **Pres Allinder**, Compliance Monitor/Regulator
- **George Loomis** and **Judith Sims**, Academic/Researcher

## NOWRA BOARD OF DIRECTORS

### Executive Committee

President	Jerry Stonebridge
VP/Pres-Elect	Tom Groves
Past-President	Raymond Peat
Sec-Treasurer	Brian McQuestion

### 2005–2008 Directors (Terms Expire December 2008)

Engineer/Designer	Mary Clark
Installer/Service Prov	K.R. “Trapper” Davis
Regulator	Mark Hooks
Academic/Research	George Loomis
Supplier/Vendor	Howard Wingert

### 2006–2009 Directors (Terms Expire December 2009)

Regulator	William “Press” Allinder
Installer/Service Prov	JR Inman
Supplier/Vendor	Albert Schnitkey

### 2008–2010 Directors (Terms Expire December 2010)

Installer/Contractor	Ellen Vause
Installer/Contractor	Peter Balas
Engineering/Designer	Rodney Ruskin
Academic/Research	Judith Sims



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## NOWRA Workshop Will Gather RMEs', Regulators' Experience

It's been 10 years since the U.S. Environmental Protection Agency (US EPA) first acknowledged that managed decentralized wastewater systems were a permanent part of our wastewater infrastructure. Almost five years have elapsed since the US EPA specified five models for institutional and management arrangements that would allow the sustainable operation of decentralized systems. Two of these models involved the creation of Responsible Management Entities (RMEs)—legal entities that have the technical, managerial, and financial capacity to ensure that decentralized systems remain viable and that operate in accordance with appropriate regulations and accepted accounting principles.

Although a number of RMEs are now operating successfully, it is clear that we need more successful RMEs in the decentralized wastewater field. In response to this need, US EPA grant funding was used for a research project (conducted by Kennedy/Jenks) that identified the business attributes of successful RMEs. A follow-up research effort is now underway that focuses on the process of becoming successful as an RME. This research project will provide guidance in the form of steps to take, questions to ask, and strategies to employ that lead to business success for RMEs. The target audience for

these materials will include three kinds of RMEs: existing, fledgling, and those who are new to the decentralized wastewater industry.

The approach in this project is to engage with people who have practical experience and to extract lessons from successes and failures both within and outside the wastewater treatment industry. As part of the research effort, a workshop was held during the NOWRA 2008 conference program specifically to gather the unique experiences and lessons of existing RMEs, regulators, and others in the decentralized wastewater industry. Later in the project, this rich collection of experience will be analyzed and transformed into accessible guidance materials that will be widely available through the internet and at other national conferences.

For more information about the project or the NOWRA workshop, please contact:

- Mary Strawn, WERF Project Manager (mstrawn@werf.org)
- Cynthia Mitchell, Institute for Sustainable Futures, UTS, Project Team Leader (cynthia.mitchell@uts.edu.au)
- Amy Macrellis, Stone Environmental, Inc., Project Team Member (amacrellis@stone-env.com)

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## NOWRA's 3rd Annual Installer Academy a Big Success!

When you think of Las Vegas, you usually think of neon lights, smokey casinos, Broadway-caliber shows, lines for the All-You-Can-Eat-Buffer, etc. Now you can add to the list—learning new skills and how to build a better business. All the while having fun, of course.

This past December, NOWRA held its 3rd (and most successful) Annual Installer Academy at the fabulous Riviera Hotel on the Las Vegas strip. This year's conference attracted 244 attendees and 28 exhibitors. The brainchild of NOWRA past-president Raymond Peat, the Installer Academy specifically occurs in midwinter as a venue for attendees whose schedules during the busy spring-fall construction season generally do not allow them to attend an Annual NOWRA Technical Conference.

The Annual Installer Academy places emphasis on addressing practical and business-related skills. Furthermore, it occurs at a time of the year when attendees can relax and reward themselves and their employees for a good year and a job well done.

This year's program consisted of an exhibit hall, three days of educational presentations, and the first NOWRA Backhoe "Roe-D-Hoe" (see pages 9 and 10). Day One began with a message from NOWRA president Jerry Stonebridge, an installer himself who would much rather be sitting on a backhoe than in a Board room. Stonebridge began the program by proclaiming that this year's Academy would be the best one yet—and he was right. His company, Stonebridge Construction, donated \$500 towards the \$1,000 Grand Prize for the Backhoe "Roe-D-Hoe" (the other \$500 was sponsored by Northwest Cascade).

The keynote speaker for the program was Bill Stuth, Sr., of Aqua Test, Inc. His subject was "Sustainability and Costs of Operations of Onsite Systems." Stuth's talk hit home with many in the audience as he emphasized "thinking outside of the box," specifically with respect to design and maintenance. Consideration of those two items should be built into larger systems to insure that they are cost-effective and perform for the long run, he said. After all, it will most likely be the installer who gets called when there is an issue or failure of the system.

The remainder of the formal program provided a choice of skill tracks to follow: Technical, Vendor Training, Practical, and Business. Many NOWRA Board members participated in the program and led sessions on their business specialties. They included Howard Wingert, Concrete Sealants, Inc.



("Managing Your Business"); Al Schnitkey, Ring Industrial ("Selecting the Legal Structure for Your Business"); Brian McQuestion, Hoot Systems ("Financial Management and Your Business"); and Trapper Davis, Coastal Plains Environmental ("So You Want to Start an O&M Business").

Product manufacturers provided personalized training on their latest products and technologies. Blocks of time and a meeting room were made available to the companies for that purpose. This year was our most successful Vendor Product program with nine training sessions conducted respectively by Salcor, Hoot Systems, Netafim, Vermeer, JET, BioMicrobics, Infiltrator, Premier Tech, and Eljen.

The Technical program held over the course of three days was a resounding success, as best exemplified by the turnout. This year, NOWRA had the pleasure of working with the Consortium of Institutes for Decentralized Wastewater Treatment Systems (CIDWT) to sponsor the first in a series of four pilot workshops for CIDWT's new curriculum for Installation of Onsite Systems. NOWRA Board Members Sara Christopherson, University of Minnesota (and NOWRA Education Chairperson), and George Loomis, University of Rhode Island, participated in this first pilot workshop. In addition to Christopherson and Loomis, the following participated: Bruce Lesikar, Texas A&M; Nancy Deal, North Carolina State University; Dave Kalen, University of Rhode

*continued on page 8*



*Networking during the Exhibit Hall Opening Reception.*

# Installer Academy a Big Success *(continued from page 7)*

Island; and Dave Gustafson, University of Minnesota. Feedback from the attendees was gathered at the end of the workshop and will be used by the Consortium to revise the curriculum for the next round of workshops. NOWRA is pleased to be involved with sponsoring all four of the Consortium's pilot workshops. The third is scheduled to occur at the 2008 Installer Academy. For more information on the CIDWT curriculum, please go to [www.onsiteconsortium.org](http://www.onsiteconsortium.org).

During the course of the three days, there were many worthy presentations. Timely topics such as Pump Selection, Troubleshooting, High Strength Waste, Inspection and Certification Programs, NOWRA's Model Code, and Creative Design Solutions are just a few of the many that make up the list too long to present in its entirety.

At the conclusion of the conference, attendees had the opportunity to take the National Environmental Health Association's (NEHA's) Installer Credential Examination. NOWRA has worked with NEHA to host this examination in the past and hopes to continue working with NEHA to make it available at all future occurrences of the Installer Academy.

Plans are underway to finalize the dates for the 4th Annual Installer Academy in December 2008. Don't miss out this

year! Remember: "Always in December—Always in Las Vegas!" Treat yourself and your staff to the only installer-oriented educational program available. Your customers and your business will thank you—and you might get some fun out of it, too. ■



*Jerry Stonebridge, President of NOWRA, discusses the EPA MOU Partnership with Crystl Tate of NEHA.*



*The top Roe-D-Hoe competitors line up for a photo op. JR Inman and Raymond Peat occupy the background wondering how they'll step up their game. Maybe next year guys!*



## First Annual Roe-D-Hoe a Great Addition to the Installer Academy

In December 2006, NOWRA's incoming president, Jerry Stonebridge, appointed Raymond Peat (past president) and JR Inman (new board member) to the Installer Academy committee. Specifically, they were to be in charge of a new event referred to then as "the equipment rodeo." We accepted the task and headed off to create the new event for the 2007 *Always in December, Always in Vegas Installer Academy*.

Organizing the event provided many challenges. First it needed a name—we ended up with Roe-D-Hoe! Then, the specifics of the contest and its rules had to be codified in argument-proof terms. We specified three events in which scores were to be awarded according to the dexterity and alacrity with which a contestant operated a backhoe-type machine—maneuvering a tennis ball suspended from the bucket so as to drop it into a small-diameter pipe, for example. We needed to identify suitable prizes and sponsor(s) to provide them. We needed a sponsor to lend the construction equipment. Etc.

With the benefit of a year of preparation, worry, planning, and organizing, the event seemed to go extremely well. We had lots of contestants, although many insisted on seeing what the contest was all about before they would sign up and operate in front of their peers.

Operators emphasizing speed were the most likely to knock things over or break something, earning zero scores. Our own Raymond Peat turned in the worst performance possible, but, as one of the organizers, he was disqualified

anyway. The only equipment that Raymond has ever operated is a riding lawn mower. Another operator with very high hopes (who shall remain anonymous) turned in zeros for all three events. We refunded his entrance fee and gave him golf balls with a recommendation to try something else.

Our winner was Bill Morton from Montana (see page 10). This old cowboy jumped up on the machine supplied by Bob Cat and moved it around like a hot knife throwing butter—not one wasted motion or second. The top spot paid him \$1000, donated by member companies, and a large \$300 gold belt buckle made especially for this event. The winner gained the right to take the Championship buckle back to Montana for a year. The second- and third-placed winners received, respectively, silver and bronze buckles.

We appreciated the good humor of everyone who participated in this new and very enjoyable event. We would like to thank our equipment sponsor PAPE (Bob Cat of Las Vegas) and also Stonebridge Construction and Northwest Cascade for providing the \$1,000 grand prize.

We have been informed that some similar state-level competitions are being held and that the organizers will send their top performers to represent them at the next Installer Academy Roe-D-Hoe. Of course, we will still have an open sign-up for everyone wanting to enter the event next year on the spot. We look forward to seeing y'all in Vegas next year. ■

—JR Inman



The world famous Roe-D-Hoe contest. This dexterity contest requires skill, speed, and finesse. Do you think you have what it takes in 2008?

# The 2007 NOWRA *Roe-D-Hoe* Winner

This was my second year of attending the NOWRA Installer Academy in Las Vegas. I was looking forward to getting lots of updated information and attending the instructive classes. I have an O & M business in northwest Montana, where we really don't have access to nearby hands-on teaching, so it was good to get my head out of a septic tank for a few days to update my knowledge.

When I got the issue of *Onsite Journal* that announced the Roe-D-Hoe competition, I thought: This is great! Instead of spending time at the blackjack table or the slot machines (after all, this *is* Vegas!), we get to have some real fun, like making fools of ourselves on construction equipment.

Before the time when I was scheduled to compete, I checked out the required routine to determine whether this was something within my capabilities. Sometimes, I operate rented equipment as the need arises, but it certainly is not something I do every day. There were other guys and gals standing around offering each other tips. I listened attentively. These are probably experienced operators, I thought, and any advice they had would be worth hearing.

When my turn came, I just said a quick prayer and jumped on the machine. When I had finished the tasks, the timers advised me to check back later because I had got a good score. After my last class of the day, I went out to see where I stood. A young man informed me that I should be at the presentation ceremony that evening so as to be awarded the first place buckle and a check for one thousand dollars. I about fell over! I had seen the winner's buckle at the registration desk (you would need suspenders to hold your pants up if you wore it), but I had no clue that I could receive any money. I asked if he was kidding. "No!" he said. "Be there at 6:30 to have your picture taken."

I am extremely grateful to NOWRA, the *Onsite Journal*, the contest organizers, the prize-money donors, and the Bob Cat dealership for providing the opportunity for me to participate in—and win!—the first annual Roe-D-Hoe competition.

"I encourage anyone who has not attended a NOWRA conference not to miss the Installer Academy in the future. It provides learning opportunities in classes, educational materials, and exhibits—not to mention the fun of Vegas and the chance to win a thousand bucks! NOWRA is a young and growing organization that provides great service to those of us in the septic industry."



Bill Morton, winner of the Roe-D-Hoe contest, accepts the grand prize from Board Member Howard Wingert and Past President Raymond Peat.

—BILL MORTON, 2007 NOWRA *Roe-D-Hoe* Winner



---

## EXTERNAL AFFAIRS COMMITTEE

NOWRA is forming a new and exciting group, the External Affairs Committee. The committee is tasked with building a coalition of support with other organizations for the purpose of identifying a framework for a national sustainable decentralized or distributed infrastructure. Collaborative programs and strategies for achieving such a framework will be pursued.

Now is the key time for our industry to represent decentralized infrastructure to external organizations and to the public. NOWRA members have the expertise, tools, and materials needed to spread the message that decentralized and distributed infrastructure must be considered as an appropriate way to handle community wastewater. The External Affairs Committee will take the lead in developing and implementing an outreach plan along with partners with whom NOWRA is joined in a Memorandum of Understanding (MOU)—USEPA, NESC, CIDWT, NAWT, NAT&T, NEHA, RCAP, and WEF. We will seek opportunities to collaborate and co-sponsor events with external groups, and we will identify outreach materials and coordinate their distribution.

During the past months, the External Affairs Committee has been working with the MOU partners to update last year's progress report, develop items for this year's work plan, and update links to the individual partners' websites. The partnership is currently working on developing a mission statement, including goals and objectives aligned with the work plan for 2008; a motto that will communicate the mission and vision is being devised. The External Affairs Committee is also leading NOWRA's contact with the Water Environment Federation (WEF) through that organization's Small Communities Committee.

The NOWRA External Affairs Committee is still in its formative stage. WE NEED YOUR HELP! In order to develop fruitful objectives and action plans, we need new committee members to volunteer their help. If you are interested in being involved with this committee—particularly if you are connected with another pertinent organization (such as the American Planners Association) or a professional engineering association that might welcome opening a line of communication—please contact Mary Clark at clam@premiertech.com, (802) 472-3074, or Alan Gale (800-966-2942).

—Mary Clark, Chair

---

## EDUCATION COMMITTEE

### The Purpose of the Education Committee

Education and training is a key component of NOWRA's mission: *"To provide leadership and promote the onsite wastewater treatment and recycling industry through education, training, communication, and quality tools to support excellence in performance."* The Education Committee (EC) works to bring to practitioners in the onsite industry exceptional opportunities for advancing their knowledge in regulatory, practical, technical, and business areas. Since NOWRA's inception, the process of educating and training members and the decentralized wastewater industry in general has occurred at NOWRA's national Annual Conference (AC) and through the training programs of local affiliates. Recently, the process has been broadened by the establishment of the annual Installer Academy (IA).

The Education Committee currently carries out the following activities:

1. Develops calls for papers for the AC and calls for training content for the IA
2. Coordinates with speakers and institutions to provide A to Z training at the AC and co-sponsored materials at the IA
3. Develops agendas based on the submittals for the AC and the IA
4. Develops, implements, and coordinates the process of reviewing the material submitted for the AC and the IA
5. Works with the headquarters office to have the AC proceedings distributed in CD-ROM format and the IA training material distributed in printed format
6. Works with the headquarters office to develop the AC evaluations forms
7. Provides educational oversight for the AC and the IA
8. Assists other organizations with developing and delivering education programs. Such assistance has been provided for the Pumper show and local-affiliate groups.

### How to Join the Education Committee

If you are interested in contributing to the committee's work, contact Sara Christopherson at 612.625.7243 or shc@umn.edu. Be sure to provide your phone number with area code and/or your email address.

*continued on page 12*

### **The Education Committee's Meeting Schedule and Participation Expectations**

The Education Committee has a scheduled conference call on the third Wednesday of the month at 1:00 pm EST. Between meetings, committee members are expected to contribute to one or more of the committee's current programs. Participation commitment can range from as much time as one can afford to a few hours per month.

### **Latest News about the Education Committee**

The Education Committee coordinated the education offered at the 3rd Annual Installer Academy in December 2007 and the NOWRA education track at the Pumper Show in late February 2008. The Committee's work on the Annual Conference held in Memphis on April 7-10, 2008, included participation in the presentation of the Nitrogen Symposium, which was held as a pre-conference event on April 7th.

Currently, the Education Committee is looking ahead to the 4th Installer Academy. Anyone with practical-educational ideas that will benefit the practitioner is urged to contact the Education Committee.

The Education Committee will be working with the HQ office over the next year to consolidate all the Proceedings of the Annual Conferences into a valuable reference resource on NOWRA's website.

—Sara Christopherson, Chair

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### **GOVERNMENT RELATIONS COMMITTEE**

The role of the Government Relations Committee is to establish and facilitate effective communication and monitoring strategies with local, state, and federal regulatory and legislative officials.

When Georgia recently developed a state water plan, the initial draft of the document included language that would have driven local governments to base development on sewers rather than on septic systems. In response, the NOWRA Government Relations Committee formed a task group to address the issue.

At the heart of the problem is the way that the Atlanta Metropolitan Region gets its water supply. The geology of the region does not provide enough groundwater to support the use of public supply wells. Because of that, man-made lakes are the necessary sources of water, many of which are built and managed by the U.S. Army Corps of Engineers. The state and local governments have a written agreement with the Corps that sets limits on the amount of water that may be taken from the lakes. Due to the explosive development in the Atlanta area, communities are now withdrawing more water than is allowed under the agreement. However, the local governments have argued

that the water that they treat and discharge back into the waterways through their sewers should be deducted from the amount they withdraw. In other words, they are saying that the water they put back should be counted as a credit against their withdrawals. (Lake Lanier is one of the lakes being used; due to the extended drought in the area and the over use, the water in the lake has reached record low levels.)

The argument made by the local governments is valid; the water that their sewers return is indeed available to be used again by users downstream. However, septic systems are at a major disadvantage in this scenario, because, unlike sewer systems, there are no meters on septic systems to measure how much water they return to the lakes by way of rivers and streams. We all know that water flows downhill from septic systems and eventually winds up back in rivers and streams. But, while there has been considerable debate among the state's hydrologists, very little research has been done to determine how much water from septic systems actually is returned to the rivers and streams and how long it takes to get there.

As a consequence, the initial draft of the Georgia water plan indicated that sewers were the preferred method of sewage disposal. In response, the NOWRA Government Relations Committee task group helped draft a letter to the authors of the water plan expressing our concerns. It also provided the results of studies that showed that much of the water released from septic systems winds up in the groundwater and, furthermore, that in certain areas of the state the treated septic-system water moved at up to several hundred feet per day.

As a result of the combined efforts of the NOWRA task group, the Georgia Onsite Wastewater Association, and a coalition of manufacturers, the water plan was rewritten to include septic systems as a continuing essential part of the state's wastewater infrastructure. Also, a strong commitment to conduct research was written into the water plan. It is our hope that some of that research will examine the issue of water returned to rivers and streams by septic systems. That information is critical to enabling the state to better manage its water supply.

This is just one example of how NOWRA is working with government officials to push for positive changes in water policy. If you are interested in joining the Government Relations Committee, please contact Mark Hooks at [mhooks@infiltratorsystems.net](mailto:mhooks@infiltratorsystems.net) or at 888-261-8265.

—Mark Hooks, Chair

*Mark Hooks is a NOWRA Board member and Chair of the Government Relations Committee. He is a soil scientist and registered sanitarian with 20 years of experience in regulating the installation of septic systems in Kentucky and Florida. He currently works as a regional regulatory consultant for Infiltrator Systems Inc.*



## Facts about Septic Locator: Its Cost Savings and Benefits

The NOWRA Septic Locator is both an online member directory and a unique website “yellow-pages” listing for the industry. It is being used throughout the U.S. and Canada, and is linked to critical partnering organizations such as the National Home Builders Association, the National Ground Water Association, and the Water Quality Association.

Replacing the production and distribution of a printed directory with the online Septic Locator has been a prudent investment for both NOWRA and its individual members. The change has saved NOWRA nearly \$40,000 in the past three years.

### How the Septic Locator Saves NOWRA and State Groups Time and Money!

- Selected data from the NOWRA member database (where all information about members is maintained) are used to provide the details used in the online directory. Instead of maintaining two file systems (one at each state office and one at NOWRA headquarters), there is now a cost-effective core database.
- Changes to member records can be made by the state associations and by members themselves, ensuring that member information is always up to date. State associations no longer are required to send in annual lists to NOWRA headquarters.
- The member data file includes recording and documentation of education and training CEUs, whereby the members may create accurate statements of their professional development.

### How the Money (and how much) Was Invested in this Program

- 2005—NOWRA’s Board decided to create an online membership directory rather than spend \$20,000 to produce the annual printed directory and an additional \$7,491.70 to mail it to 3943 members. The decision also would result in a more effective document—by the time a printed directory was produced, a portion of it was already out of date.
- 2006—NOWRA upgraded its website’s technical capabilities to provide for administrative management of the Septic Locator and an online Conference registration system. The cost was \$7,500 plus the site hosting fees. NOWRA did not produce the traditional printed directory.
- 2006—NOWRA received two small grants to establish the model code and the *Water for All Life* website (for the 2007

international conference) and improved the existing website. These improvements were accomplished by the combined efforts of a technical contractor, NOWRA staff, and a Board member. The **cost savings** realized to NOWRA by the in-house work on the content and structure of the three websites was nearly \$25,000.

- In 2007, if NOWRA were to have produced and mailed a printed directory the total cost would have been \$32,223.20 (\$20,000 production cost + \$2.40 postage per document for 5093 members).

In 2007, NOWRA has an integrated website communication system that hosts, as member-benefit marketing tool, the membership database and directory/Septic Locator, an e-newsletter, and an online registration capability for conferences and meetings. In 2007, particularly with the effectiveness of the online directory, the wisdom of the decision made in 2005 to “go online” has been soundly affirmed.

In addition, NOWRA’s 2007 Business Benefit Program has increased to 16 Gold members—a 25% increase from the 2006 total.

### Who’s Looking at and Using the Septic Locator

NOWRA began aggressively marketing the Septic Locator following the 2007 conference (April 2007). As a result of that marketing effort, usage of the site has dramatically increased. The statistics for the month of July 2007 are:

- Total number of visits to [www.septiclocator.com](http://www.septiclocator.com) during the month of July: 1,603
- Average visits per day in July: 51; peak day: 87
- Average number of pages viewed per day: 141; peak day: 484.
- 54% of the visits originated directly to [www.septiclocator.com](http://www.septiclocator.com)

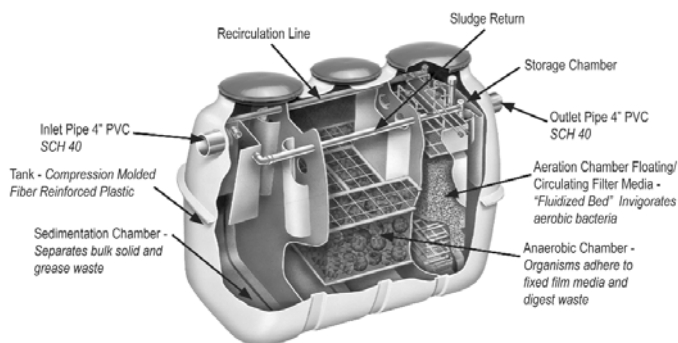
Other sites referring/directing users to the Septic Locator were: Google, [wellowner.org](http://wellowner.org) (NGWA), [toolbase.org](http://toolbase.org) (NAHB), and [realestatejournal.com](http://realestatejournal.com).

Members from Delaware, Washington, and Virginia have reported receiving contacts for business as a result of the caller’s visit to [septiclocator.com](http://septiclocator.com). In July, the NOWRA office received six requests from companies asking to join NOWRA and to be listed on the Septic Locator. ■

## New Fusion Series System from Zoeller Pump Company

The Fusion Series treatment systems from the Zoeller Pump Company and Fuji Clean Company represent the best in Japanese wastewater technology. Using both anaerobic and aerobic zones, the Fusion process eliminates the need for a preceding septic tank and consistently produces effluent of secondary-treatment quality.

That high level of treatment is accomplished in part by the use of optimally designed anaerobic and aerobic polypropylene filter media. Designed to be never removed or replaced, the media carry a lifetime guarantee. Key features are constant recirculation of treated effluent through the system and a twice-a-day automatic backwash cycle that returns residual sludge to the head of the system. Those processes are driven by the action of oxygen delivered by a quiet programmable linear air compressor. The energy consumption of this efficient blower is comparable to that of an 80-watt light bulb. The Fusion's control panel powers the blower and monitors the system's airflow and water level. This "drop-in" system is among the most easily installed and maintained systems on the market.



Fusion models include the ZF-450, ZF-600, and ZF-800 for 3, 4, and 5-bedroom homes, respectively. All are NSF/ANSI Standard 40 Class 1 systems and are approved for use by many state and regional health entities.

*For more information please call 1-800-928-7867 or visit [www.zoeller.com](http://www.zoeller.com).*

## Advance Drainage Systems' New Arc™ Leaching Chamber

The newest addition to Advanced Drainage Systems' Arc chamber line, the Arc 36 Standard unit, is five feet long and has a drop and lock joint connection that also permits articulation. A diamond plate traction pattern on the external corrugations provides a non-slip surface. The Arc 36 leaching chamber is a sturdy, HDPE unit that combines maximized infiltrative surface area and storage capacity with an improved structural design that for conventional leach field systems. The improvements

to the new Arc 36 provide unique installation efficiencies and safety features that are becoming the choice for contractors and inspection personnel within the on-site industry.

*Additional information about Advanced Drainage Systems products can be easily found at: [www.ads-pipe.com](http://www.ads-pipe.com) or by calling ADS at 800/821-6710.*

## The Baltimore Charter for Sustainable Water Systems

At NOWRA's 2007 annual conference in Baltimore, Maryland, scientists and speakers from around the world convened the *Water for All Life* conference, co-sponsored by the International Water Association (IWA). The conference included a workshop on intensive research needs led by 50 national and international experts and was co-sponsored by the Water Environment Research Foundation (WERF).

One of the many positive outcomes of the workshop was the development of a statement that acknowledges the need for commitment to a new set of goals necessary for fulfilling our global water needs.

The statement is as follows:

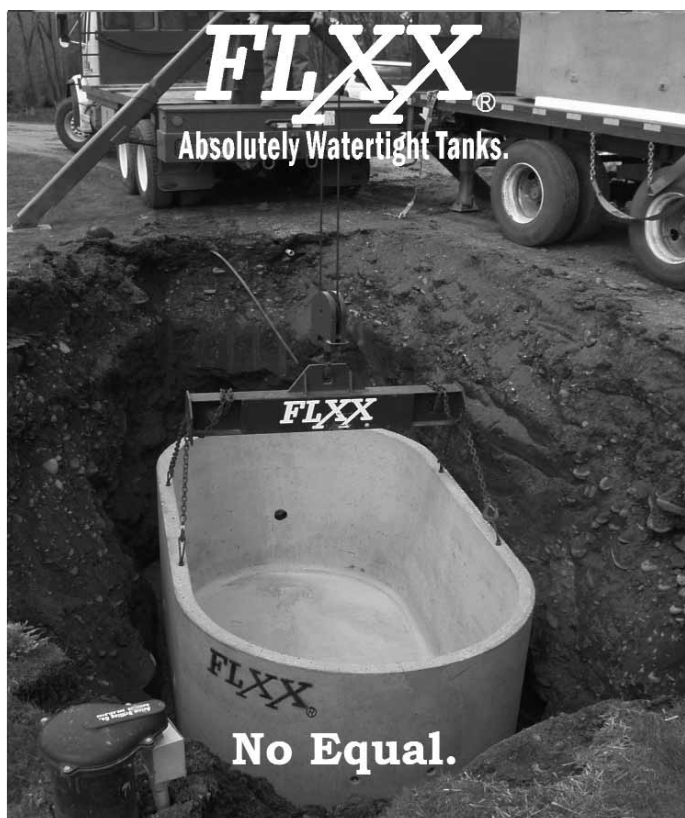
### The Baltimore Charter

Water is at the heart of all life. In the past, we built water and wastewater infrastructure to protect ourselves from diseases, floods, and droughts. Now we see that fundamental life systems are in danger of collapsing from the disruptions and stresses caused by this infrastructure.

New and evolving water technologies and institutions that mimic and work with nature will restore our human and natural ecology across lots, neighborhoods, cities, and watersheds. We need to work together in our homes, our communities, our workplaces, and our governments to seize the opportunities to put these new designs in place.

Our group of scientists, engineers, environmentalists, government officials, manufacturers, and members of the private sector are part of the solution. We have both the opportunity and obligation to participate with others on this task of transforming how we think and act in relation to water.


We commit to implementing more sustainable water systems by expanding uses and opening new markets for small-scale treatment processes, advancing research on micro-biological and macro-ecological scales, inventing new technologies based on nature's lessons, creating new management and financial institutions, reforming government policies and regulations, and elevating the public's water literacy in the public. ■



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## NOWRA & WQA Cooperate on Softener/Septic System Questions

By Matt Byers, Ph.D., and Joe Harrison, P.E., CWS-VI

The National Onsite Wastewater and Recycling Association (NOWRA) has been seeking to understand the influence of water softeners/conditioners on septic systems. Arguments have been aired that softeners/conditioners are innocuous and, conversely, that softeners/conditioners are detrimental to septic systems. There are data of varying qualities that support both arguments. Consequently, the question remains open.

NOWRA and the Water Quality Association (WQA) have agreed formally on a partnership to determine the effects, if any, of water softeners/conditioners on onsite systems. Where issues arise, both partners pledged to seek workable solutions that will be beneficial and responsive to the consuming public they serve. Both NOWRA and WQA have formalized their processes and have formed task forces designed to address the issue. The mission of the NOWRA Task Force is “to determine the influence of water softeners and water conditioning equipment on onsite systems, promote a professional synergy with WQA, and define useful solutions where needed.”

First, the work will seek to compile and understand what is known about water softeners/conditioners and onsite systems. Secondly, efforts will be made to devise research protocols and to design practical methodology to evaluate the relationship between water softeners/conditioners and onsite system performance. Third, the task force will seek funding for research and coordinate its implementation.

To those ends, two symposia were held, one at NOWRA (Cleveland) and another at the WQA (Chicago). Data supporting either argument were solicited by Jim Converse (Professor Emeritus, University of Wisconsin). The Proceedings of the NOWRA symposium are now available. During the WQA symposium, speakers from the onsite community spoke about technology and the regulatory framework under which the industry works. These efforts constituted a good beginning, but both partners agreed that adequate data were not available to settle the question. It was determined that more field experience was necessary.

The partners agreed that sites that have both onsite systems and water softeners/conditioners should be visited by onsite

professionals and water-softener/conditioner professionals so that both parties could teach each other about their respective equipment and industries and thereby create a useful synergy. Another recommendation—obvious in retrospect—surfaced. If an onsite wastewater professional suspects that a softener/conditioner is causing a problem with an onsite system, that person should contact a local softener/conditioner professional to seek advice about the device and its operation. Conversely, if a softener/conditioner professional has a question about an onsite system, that person should contact a local onsite professional. Just asking the right person the right questions should save both categories of professionals much time and effort.

Field experience was obtained through the leadership of Tom Konsler (Orange County Health Department, NC) and Nancy Deal (NCSU and CIDWT), who were able to draw on their previous experience with the effects of water-softener/conditioner discharge on septic tank performance. In July 2007, they launched a pilot study in a willing neighborhood in Orange County that had septic systems with and without softener/conditioner-backwash additions. First they establishing a pertinent profile of all the houses in the neighborhood and then created an extensive protocol to evaluate the performance of each septic tank and each water softener/conditioner in the neighborhood. Sampling of source water, septic tank effluents, and septic tank contents at specified liquid horizons then proceeded throughout the neighborhood, attended by onsite experts, a microbiologist, health-department personnel, and representatives from the WQA.

That pilot study yielded an important collaborative evaluation of actual field conditions. The onsite industry will continue to benefit as it increases its collaboration with water-softening/conditioning and related industries and services. The results of the pilot study will assist the authors in their development of a deeper investigation to define how different influents affect or do not affect septic-system performance. Funding will be sought by the authors and their collaborators for the development of a more comprehensive protocol that will take the study beyond water softeners/conditioners into the larger issue of onsite-system evaluation and trouble shooting.

Dr. Bruce Lesikar (Texas A and M University and CIDWT) and D.J. Shanahan (Sharpwater Company, DE) have piloted the creation of a site-evaluation survey designed to implement the recommendation (previously mentioned) that an automatic exchange of ideas and expertise should occur between professionals of the onsite industry and those of the water-

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**About the Authors:** Matt Byers, Ph.D., is chairman of the Technical Practices Committee of NOWRA. Joe Harrison, P.E., CWS-VI, is technical director of the Water Quality Association.

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## The Bold Statement

By Valerie Nelson, Ph.D.

**D**ecentralized water technologies and designs, such as those for water-efficient appliances, rooftop rain gardens, and onsite wastewater treatment and reuse, are the keys to enhancing the performance of the nation's aging centralized water and sewer systems and assuring adequate water supplies and healthy ecosystems into the future.

Decentralized systems create a host of other benefits for communities—energy savings, improvements in air quality, creation of green spaces, restoration of streams, aquifers, wetlands, and habitat, and stimulating the creation of “green” companies and jobs. In the long-run, the nutrients in wastewater may be of value, and synergies with distributed energy production and other infrastructure may be found.

The value of using decentralized infrastructure for setting the nation on a path to water sustainability arguably is second only to that of using better farming practices, but the potential is not well-articulated or widely-known. Decentralized technologies remain at the fringe of engineering practice, while construction of big-pipe water, stormwater, and wastewater infrastructure continues. Part of the reason for this is that the advocates, entrepreneurs, and professionals of decentralized technology tend to operate independently in separate technology spheres: water supply, stormwater, and wastewater. They focus on individual technologies or “appliances” rather than working cooperatively on “the big picture.”

This “telescope” approach thwarts the emergence of the major benefits and values of the decentralized system. A dramatic synergy of value-creation will occur only when water's sources, uses, and movements are considered integrally within a watershed and all three of the technology spheres are considered jointly at site or neighborhood scale. When reuse is

examined, for example, the advantages of decentralization can be recognized easily—it costs less to use, treat, and reuse water within the local site than to pipe water in, pipe wastewater out, and pipe treated water back for reuse. More peripheral advantages of using decentralized systems are coming to light as the concept receives more scrutiny—creation of green space throughout communities, for example.

Localized and integrated capture, use, treatment, and reuse of water mimics the manner in which nature itself uses water—nature moves water and minerals through large cycles of cloud formations, rivers, and groundwater flows, but also uses, stores, reuses, and cleans water at the local level to support complex and abundant webs of life. Our centralized, big-pipe infrastructure relies instead on an industrial model of specialization and economies of scale. That model has more than adequately protected the public from pathogens and floods, largely by storing and piping clean water long distances into population centers and then transporting wastewater pollutants away. But in the end, that approach is wasteful, environmentally disruptive, and ultimately not sustainable as populations increase and more and more land is developed. Extremes of heavy storms and droughts related to climate changes may place even greater stresses on this centralized natural/man-made water system that we have uncritically built piece by piece.

Transforming the way that professionals, advocates, and the public think about looming ecosystem crises and about the unsustainable practices built into the current water infrastructure is the first and essential step to realizing the potential inherent in decentralized water technologies. Such a shift will be difficult to create when conventional water engineering has always been considered one of society's greatest accomplishments in public health and convenience. Changing the infrastructure from an industrial model to a “biomimicry” model will entail daunting changes in the governance and institutional framework of water management. A market wherein a public bureaucracy is closely intertwined with the private sector is more difficult to transform than a wholly private market, where the “creative winds of destruction” can sweep aside outmoded products and practices. A realistic fear is that inertia inherent in the typical public/private water-management framework will forestall a transition to more sustainable technologies and designs.

The workshop following the *Water for All Life* conference was intended to explore the various pressures for and against change in the fundamental paradigm of water management. A series of workshops with experts and advocates was convened

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**About the Author:** Dr. Nelson's educational background is in economics, and in particular market organization (B.S. from Harvard/Radcliffe, M.Sc. from London School of Economics, and PhD from Yale University, with a dissertation on public and private markets in vocational education), and she was a lecturer and visiting assistant professor in public policy at the Kennedy School of Government and M.I.T for eight years. Dr. Nelson has founded and directed the national Lighthouse Preservation Society, and won a Presidential Design Achievement Award for her work with Senator George Mitchell on a Lighthouse Bicentennial Fund. She served on the Gloucester City Council for two terms, where she worked on wastewater and fisheries issues, in particular. Since forming the Coalition for Alternative Wastewater Treatment, Nelson has written numerous reports on decentralized wastewater issues, presented policy and market-related papers at national conferences, and worked with environmental and industry advocates bringing information on the decentralized wastewater field into national policy deliberations.

*continued on page 18*

## The Bold Statement *(continued from page 17)*

to explore the institutional issues involved and to tease out new strategies for jump-starting a transition and steering it to success. Key topics in science and technology development, market restructuring, and public participation were discussed.

Case studies and workshops identified scattered drivers that would be likely to spawn changes in the established water-management paradigm: increases in the occurrence or severity of droughts, flooding, wet-weather pollution, and development sprawl; new and creative ways of perceiving and explaining biomimicry and market transformation; and niche successes by community activists and entrepreneurs in building decentralized systems. Some probable impediments to change were identified: bias in government regulation and funding that tends to perpetuate the traditional infrastructure; distorted pricing of water; risk aversion; conventional public attitudes and expectations; water-management outlooks that are oriented around big-pipe infrastructure built in public rights-of-way.

Attempts to leverage the drivers or break down the impediments one at a time will be ineffective; there are too many interlocking pieces in the traditional paradigm that work to lock it in place. The essential strategy, therefore, is the creation and nurturing of “space” wherein multi-faceted paradigm innovation can be carefully planted. An example of this process is development of a favorable water component within the Green Building movement, where new products and new markets already have been successfully created in the parallel fields of energy and construction materials. Another avenue is participating in community demonstration projects where favorable influence can be applied to the structuring of institutional management, financing, and regulation.

These projects, over time, will clarify how the localized and integrated “biomimicry” model works to create multiple community values and engage new partners. Essentially, the triple impacts of decentralized water-efficiency, stormwater retention/reuse, and wastewater treatment/reuse have the potential to reduce dramatically the amount of water taken out of aquifers and streams and to reduce wet-weather runoff and sewer flow into the environment. Two of several other beneficial components of decentralized infrastructure are (1) its support for new plants and trees that “green” cities and towns and (2) the concomitant closed-loop planning, whereby energy and nutrients are captured for reuse.

Mimicking the complex interdependencies of species in nature is the clever and responsible way for society to restructure its decisions and actions with respect to water use. The rewards are magnified with a richer set of alternatives when the private sector, community organizations, professional organizations, and the public participate. Conversations among a diversity of groups typically lead to more creative and productive solutions than those emanating from one specialized group. Furthermore, in nature, individual species survive by opportunistically finding niches in the web of life. Similarly, participants in a biomimicry infrastructure model would find ways to take value from the model and simultaneously create value for other participants. For example, the private sector can make money from installing decentralized systems or inventing new technologies, while at the same time reducing water use, enhancing green space, etc.

Participants in multi-faceted conversations about sustainable water infrastructure must include academics, entrepreneurs, engineers, activists, bureaucrats, managers, and the public. Researchers need to study the imminent crises in water quantity and quality that the nation will be facing and then link those crises to the differential impacts of centralized, decentralized, and hybrid infrastructure alternatives. Activists need to question their continuing support for the traditional infrastructure and explore with an open mind the benefits that can be achieved through decentralized alternatives. Public bureaucrats and managers need to take a larger, holistic view of water management and begin to collaborate with the private and non-profit sectors in identifying higher-value alternatives.

“Green” building and community demonstration projects are clarifying what works, what does not work, and how new values are created in the decentralized model. The decentralized approach is becoming better understood and better known across a broad range of constituencies. As a result, there is a groundswell of support for serious restructuring of water institutions and policies. The restructuring will include (1) an integration of planning, funding, and regulation across the currently segmented water, stormwater, and wastewater sectors, (2) an expanded role for the private sector in technology development, systems management, and finance, (3) a closer link between professional practice and community participation, and (4) careful management and stimulation of continuous innovation and reform. ■

## NOWRA & WQA Cooperate on Softener/Septic System Questions *(continued from page 16)*

conditioning/softening industry whenever an undesirable conflict is suspected between the practice of the one industry and that of the other. That instrument was described to the public at NOWRA, Denver, and has since been adopted for use in the field.

In summary, the “softener project” has attracted much

interest. It is still controversial. NOWRA and WQA intend to fully define the extent of the influence that water softeners/conditioners have on onsite systems. NOWRA and WQA intend to work together to create and sustain a professional synergy and thereby provide the consuming public with solid answers to the remaining questions. ■



### California Onsite Wastewater Association (COWA)

This year's annual COWA conference to be held May 13th to 15th at the DoubleTree Hotel Event Center in Sacramento, CA, promises to be one of the most well attended COWA conferences ever. The main theme of this year's conference will be "Sustainability" and its impact on the onsite wastewater industry. The Sustainable component of the conference will attract a more diversified group of attendees than we have historically seen at COWA. In addition, the timing of California Assembly Bill AB885 regulations with the conference makes this an event not to miss.

A new feature of the conference will be entertainment by Will Durst (a national TV and radio talk host and political comedian) on Tuesday evening. On Wednesday, activities will include a late afternoon tour of "The Old Sugar Mill," the home to several new wineries in an interesting redevelopment project on the Sacramento River, 17 miles south of downtown. In addition to a tour of the new onsite wastewater system, participants will enjoy food and wine served in a great networking environment.

This is a must attend show for stakeholders in the onsite wastewater industry, and it will have great networking and information-exchange opportunities. Please visit the COWA web site ([www.cowa.org](http://www.cowa.org)) to register for the conference.

### COWA Board Election

We would like to congratulate the new COWA officers who will undertake the leadership roles indicated:

Karen McBride, President  
Barbara Bradley, Past President  
Pete Lescure, Treasurer  
Brad Banner, Secretary  
Mark Adams, VP North  
Steve Braband, VP South

### Delaware Onsite Wastewater Recycling Association (DOWRA)

As difficult economic times fall upon everyone, DOWRA is working hard to sustain its membership and to provide new educational programs to assist the on-site community. Currently, the organization is strong with 277 members. With this new year comes many changes, including change in leadership and a change in the conference location. This year's conference will be held at the Dover Downs Hotel and Casino in an attempt to expand current conference practices.

Ken Walsh is the new President. He can be reached at [mks1@aol.com](mailto:mks1@aol.com) or 302-436-8822. Hilary Moore is the NOWRA liaison. She can be reached at 302-739-9331 or [Hilary.Moore@state.de.us](mailto:Hilary.Moore@state.de.us).

DOWRA's meeting dates for the remainder of 2008 are as follows:

- **MAY 1**—On-site Professional of the Year Award
- **JUNE 10**—Board/Membership Meeting  
6:30 pm Pizza; 7:00 pm meeting starts  
Board Room, Exhibit Hall, Delaware State Fairgrounds
- **JULY 17–26**—Delaware State Fair Exhibit  
Grandstand, Delaware State Fair, Harrington, DE
- **AUGUST 21**—DOWRA Membership Appreciation Crab Feast, Invitation Only\*, 6:00 pm, Seafood City, Felton  
\*All those who attend Board/Membership meetings will be invited
- **SEPTEMBER 8**—Board/Membership Meeting  
6:30 pm Pizza; 7:00 pm meeting starts  
Board Room, Exhibit Hall, Delaware State Fairgrounds
- **SEPTEMBER 12**—DOWRA Annual Golf Tournament  
12:00 pm at Jonathans Landing Golf Course, Magnolia
- **OCTOBER 14–15**—12th Annual DOWRA Conference  
Dover Downs Hotel and Casino, Dover, DE

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## Iowa Onsite Wastewater Association (IOWA)

The NEHA Certified Installer of Onsite Wastewater Treatment Systems (CIOWTS) examination was offered for the first time in Iowa at the 2008 IOWWA Annual Conference. To prepare potential examinees, Sara Heger Christopherson and Dave Gustafson of the University of Minnesota Extension presented a two-day installation overview session. Twenty-seven contractors and inspectors attended the course prior to taking the examination.

Those who passed the NEHA examination are eligible to be recognized as IOWWA Board-Certified installers. To obtain the certification, an applicant must submit to the Board a copy of the NEHA test results along with a \$50 application fee. When the application is approved, IOWWA will take the following action on behalf of the newly certified installer:

- Issue a Certificate of Board certification suitable for framing
- List the certified installer on the IOWWA web site
- Ask NOWRA to provide a certification notation in the Septic Locator listing
- Track IOWWA-sponsored or -approved training attended by the certified installer
- Allow the certified installer to mention IOWWA Board certification in advertising
- Ask county regulators to identify certified installers on contractor lists provided to the public

The IOWWA Board certification must be renewed every two years. Renewal requires that a specified number of hours of IOWWA-approved instruction be undertaken during the preceding two years.

As long as interest in the certification examination waxes, IOWWA will continue to offer it at the annual conference. IOWWA also will sponsor the examination at convenient locations around the state as interest arises. IOWWA is contemplating establishing local programs to train, test, and recognize other service providers, including designers, inspectors, and maintenance providers.

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## Michigan Onsite Wastewater Recycling Association (MOWRA)

Over 500 people attended the Michigan Onsite Wastewater Conference for the second year in a row. The conference showcased 46 exhibit booths. Out-of-state speakers included George Heufelder from the Massachusetts Test Center and Dr. Mark Gross from Orenco Systems, Inc. Michigan state and local regulatory officials, designers, manufacturer representatives, and Michigan State University educators rounded out the speakers at the educational and training sessions.

The conference is a cooperative effort of:

- Michigan Onsite Wastewater Recycling Association

- Michigan Environmental Health Association
- Michigan Septic Tank Association
- Michigan Water Environment Association
- Michigan Dept of Environmental Quality
- Michigan State University

The Conference has now successfully completed its 57th year, staking claim to being one of the longest running onsite-wastewater-specific conferences in the nation.

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## Minnesota Onsite Wastewater Association (MOWA)

**Membership.** We are renewing and recruiting new members for 2008. In 2007 our membership included 304 businesses involving 519 people—a significant increase over membership in 2006. As of January 30, 2008, our membership includes 234 businesses involving 412 people. Renewal applications and applications for new memberships are coming in every day; we hope to exceed last year's membership before the March 3 annual meeting.

**SSTS Stakeholders Task Force.** In 2007, MOWA initiated legislation to clarify the licensing requirements for professionals working with Subsurface Sewage Treatment Systems (SSTS) in Minnesota. Our goal for this legislation was *to have the right people with the right skills, qualifications, and authorization doing the work of designing, building, operating, and maintaining the small and mid-sized wastewater treatment systems needed to provide cost-effective protection of human health and the environment in Minnesota.*

The legislation resulted in statute language that: (1) allowed ISTS licensed professionals to work on systems up to 10,000 gpd through 2010; (2) created a SSTS Stakeholders Task Force to attempt to find a consensus solution to the conflicting statutes relating to ISTS licensed professionals and Professional Engineers, Soil Scientists and Geologists; and (3) required the MN Pollution Control Agency (MPCA) to report back to the legislature in February 2008. The Stakeholders Task Force met six times with agreement on several points. The MPCA report will be submitted on February 15.

MOWA will be working by legislation and other means during the next 1–3 years to find a satisfactory resolution to the SSTS issue. MOWA has stuck firmly to its original goal stated above through the entire negotiations. The decisions will define the working parameters of SSTS professionals and decentralized systems for many years to come.

**Minnesota Adopts New Rules.** On February 4, 2008, major changes to Minnesota's rules for Subsurface Sewage Treatment Systems (SSTS) go into effect. The process for the changes began in January 2004, and for three years the MN Pollution Control Agency (MPCA) gathered ideas and comments from many people, businesses, and organizations to

revise the rule. MOWA offered many ideas and potential solutions to controversial issues.

After a long and deliberate process of rule making, the MN Rule Chapter 7080 has now become MN Rule Chapters 7080 (individual systems), 7081 (mid-sized systems), 7082 (local governance), and 7083 (licensing). Now it is up to the industry and the local government units to learn what it is all about, how it will affect the work, and what it means to businesses, regulations, and licenses.

MOWA has contracted with the MPCA to provide information regarding the impacts of the changes on practitioners in the field. A packet containing a new rules booklet and an 8-page publication written by MOWA volunteers highlighting the impacts to the industry will be mailed to all licensed businesses. In addition, eleven regional meetings will be conducted by MOWA volunteers in March and April to discuss the changes with their peers.

The changes impact homeowners, regulators, and businesses. MOWA believes that the rule changes will improve the protection of human and environmental health in Minnesota.

**Youth Scholarship Program.** Up to five \$1000 scholarships are available to graduating seniors and college students of MOWA-members' families and employees' families in 2008. The theme of this year's required essay is: "Discuss the long-term affects of 'straight pipe' wastewater discharges in MN and the possible solutions to this problem." Applications accompanied by the essay are due April 21, 2008.

**MOWA Board and Committee Highlights.** The MOWA Board of Directors and committees have been busy doing things and making decisions. Highlights are:

- Ten Strategic Planning high-priority goals for 2008–09:
  - Maintain a sound organizational structure
  - Create a list-serve for members and industry

- Increase organizational efficiencies
- Become as sophisticated as our industry requires
- Improve communication, connection, and education services with the legislature
- Become an even stronger, more respected voice for the industry
- Increase membership
- Utilize NOWRA resources
- Create strong connections and alliances with additional agencies and organizations

- The Executive Committee has been interviewing candidates for Executive Director and plans to have someone hired and in attendance at the March MOWA Convention
- MOWA representatives on the SSTS Stakeholder's Task Force have been busy wrapping up their work and contemplating the next steps.
- The legislative / cluster task force committee has met and is formulating its legislative agenda. The legislative session begins February 12.

**Board Meeting Schedule.** The regular Board meetings take place on the 2nd Thursday of each month. Most are face-to-face meetings at a central location, but occasionally we meet via a conference call. The mode is determined 1 to 2 months in advance.

**MOWA Contact Information:**

Executive Director (through March 2008 only)

Ken Olson—mowaken@pitel.net or 507-356-8686

MOWA Office—Karen Doll, Administrative Service

Provider—mowakaren@pitel.net or 507-356-8022 or 888-810-4178

*continued on page 22*

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professional profile updated on**  
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## Missouri Smallflows Organization Update (MSO)

The Missouri Smallflows Organization (MSO) held a very successful 12th Annual Conference and Exhibition in Columbia, MO, on January 21, 22, and 23, 2008.

Thirty vendors displayed their equipment and services in the exhibit hall, one of the few that allow attendees to inspect large equipment, such as concrete tanks and treatment units, in a warm indoors environment.

A one-day pre-conference seminar on Media Filters was conducted by George Loomis, Director of the New England Onsite Wastewater Training Program. Onsite installers, inspectors, soil scientists, engineers, and regulators comprised the 140 attendees.

The two keynote speakers were: a representative of the Missouri Highway Patrol, who spoke on MODOT Regulations for Hauling Equipment; and Jerry Traynham, President of Aqueonics, Inc., who spoke on Wastewater Mining and Reuse.

Topics for breakout sessions during the three days included:

- Basics of Electricity
- Safety on the Jobsite
- Equipment Maintenance
- Advanced Treatment Units for Difficult Sites
- Missouri Geology and Its Effect on Wastewater Systems and Pumps.

The featured speaker at the MSO Business Meeting was Alan Gale, the new Executive Director of NOWRA. At the meeting, the MSO membership voted to remain members of NOWRA through 2009. Attendance at the Conference was estimated to be 400.

MSO has expanded its selection and location of training seminars for 2008. Thirty seminars are scheduled, at least one of which will be held within 50 miles of any person in Missouri. Seminar topics include:

- Troubleshooting Onsite Systems
- Hydraulics
- Operation and Maintenance of Onsite Systems
- Basics of Onsite Drip Irrigation
- Pumps/Panels/Electrical
- Lagoons
- Drainfields/Curtain Drains

The Missouri Department of Health and Human Services requires that onsite installers, inspectors, and soil scientists be licensed. To renew their licenses, they are required to have 20 hours of continuing education over a 3-year period.

Visit MSO on the web at: [www.mosmallflows.org](http://www.mosmallflows.org).

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## Yankee Onsite Wastewater Association (YOWA)

(Connecticut, Maine, Massachusetts,  
New Hampshire, Rhode Island, and Vermont)

YOWA is pleased to announce the election of two new members to the Board of Directors for 2008: George Loomis, New England Onsite Wastewater Training Center at the University of Rhode Island, and Lauren Dunlap Usilton, J&R Sales and Service in Massachusetts. Loomis and Usilton will serve 3-year terms as Directors of YOWA.

New President Steven Corr is encouraging a push for new members and the further development of YOWA's two standing committees—Outreach and Education. For 2008, the YOWA Board endorsed the increase in membership dues announced by NOWRA and established two new categories and rates for 2008 YOWA members—Regulator and Corporate Group.

YOWA plans to help meet the need for training of onsite professionals in New England. We plan to accomplish this through one-day specialty workshops similar to the event held in September 2007 in Vermont or through the co-sponsorship of large regional programs, such as the 3rd Northeast Onsite Wastewater Treatment Short Course and Equipment Exhibition, which was held March 11–13, 2008, at the Mystic Marriott Hotel and Spa in Groton, Connecticut. YOWA was pleased to sponsor this program with the New England Interstate Water Pollution Control Commission (NEIWPCC).

The Northeast Onsite Short Course event takes place every three years. It provides a unique opportunity for local and regional public officials, state and federal regulators, environmental interest groups, engineers, designers, installers, pumpers, and concerned citizens to learn from and interact with the most knowledgeable people in the onsite industry. National and regional experts are on hand to conduct sessions on advanced technologies, management, pollutant removal, and emerging issues. Having these experts—and their knowledge—in one central location in the Northeast at one time allows for an efficient learning experience, particularly for local officials whose ability to travel to conferences and other educational events is restricted by budget constraints.

For more information on YOWA:  
888-YOWAORG (888-969-2674)  
[yankeeonsite@gmail.com](mailto:yankeeonsite@gmail.com)  
[www.nowra.org/yowa](http://www.nowra.org/yowa)



# NEWS

from NOWRA HEADQUARTERS

By Alan Gale, Executive Director

**A**braham Lincoln once said, "As our case is new, so we must think anew and act anew." How true that phrase has become with NOWRA in the midst of change. We are making great progress in the transition to new management and a spirit of optimism is blooming among NOWRA members. It is a time of growth for your organization. I am very please to be a part of it.

Thirty days before the 2007 Installer Academy, I became your new Executive Director. With the help of the committees, Board members, and new headquarters staff, the Installer Academy conference in Las Vegas was a success. The Roe-D-Hoe was a blast, the sessions were educational, and the attendees and exhibitors were happy. Thank you to everyone who helped make the conference a success. I look forward to having time to plan the next one!

As I write this, NOWRA Headquarters is in the throes of planning the 2008 Annual Conference and organizing the new national headquarters. The work being done behind the scenes is laying a strong foundation from which to grow. It feels like we're getting our feet under us and we are begin-

ning to move forward. Many of the internal processes changed when BTF Enterprises became the new management company, and the desire has increased to move NOWRA to the

next level. It became very clear after researching NOWRA, reading the supplied materials, and visiting Missouri (thank you Janet Murray and the Missouri Board), that NOWRA needs to work more closely with its Local Affiliate Groups. The Local Affiliate Groups represent the vast majority of the NOWRA membership, are the local voice of the members, and provide valuable training, representation, and guidance. It is the desire of the NOWRA Board to support the Local Affiliate Groups. How do we go about doing that?

A Local Affiliate Group Leaders' meeting is being held during the Annual Conference in Memphis. I hope to gather valuable information there and propose new ways, or perhaps revive past ideas that went untested, to create more effective and beneficial partnerships with the local groups. At this meeting, I will be proposing new management software to the group and demonstrating the benefit of association management software.

NOWRA's internal processes are being evaluated in an ongoing effort to better serve the NOWRA membership. I did not want to make the mistake of changing things without first learning what has worked and what has not. In my experience, it is always best to learn first, ask clarifying questions, work the existing processes, then suggest change (if needed). With that in mind, we're looking at the on-line tools, financial management, membership services and benefits, relationships, policies, our influence on the industry, and much more.

It's an exciting time to be a part of NOWRA. I'm looking forward to talking with you, discussing our future, working to further the onsite wastewater industry, and helping NOWRA retain its leadership role. ■

Do you have ideas or feedback to share with NOWRA management? We want to hear from you! Please contact NOWRA Headquarters by phone (800) 966-2942 or email [info@nowra.org](mailto:info@nowra.org).



## Your new NOWRA Headquarters contact information:

3540 Soquel Ave., Suite A, Santa Cruz, CA 95062

Toll free: 800-966-2974 • Phone: 831-464-4884

Fax: 831-464-4881

[www.nowra.org](http://www.nowra.org) • [info@nowra.org](mailto:info@nowra.org)

# Upcoming Local Affiliate and NOWRA Events

**May 13-15**

California Onsite Wastewater Association  
2008 Annual Conference  
Sacramento, CA  
Contact: 707-579-4882 or cliffrrt@msn.com

**June 5-7**

Arizona Onsite Wastewater Recycling Association  
(AzOWRA) Educational Conference  
Flagstaff, Arizona  
Contact: [www.azonsite.org/](http://www.azonsite.org/)

**June 22-25**

National Environmental Health Association  
NEHA Annual Educational Conference  
Tucson, AZ  
Contact: 303-756-9090 or [www.neha.org](http://www.neha.org)

**July 31-August 2**

Florida Onsite Wastewater Association  
2008 Convention & Buyers Show  
Orlando, Florida  
Contact: [www.fowaonsite.com](http://www.fowaonsite.com)

**October 14-15**

Delaware Onsite Wastewater Recycling Association  
12th Annual Conference  
Dover, DE  
Contact: Hilary Moore, 302-739-9331 or  
[Hilary.Moore@state.de.us](mailto:Hilary.Moore@state.de.us)

**December 8-10**

NOWRA 4th Annual Installer Academy  
Las Vegas, NV  
Contact: 800-966-2942 or [www.nowra.org](http://www.nowra.org)

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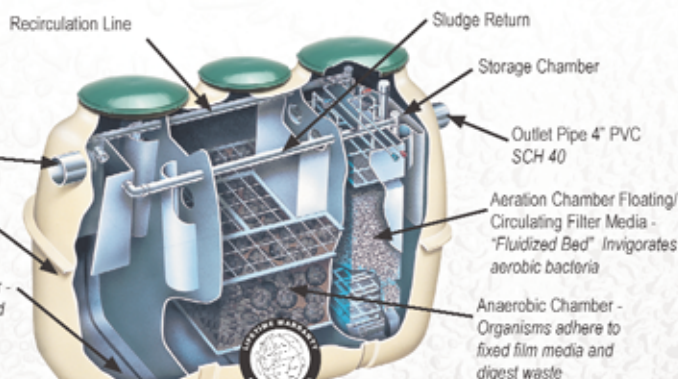
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Online registration will be available at [www.nowra.org/academy.html](http://www.nowra.org/academy.html)

For more information, call NOWRA at 1-800-966-2942