MASE Newsletter

Maine Association of Site Evaluators

February, 2013

MASE Annual Meeting & Technical Seminar

March 5, 2013

Ramada Conference Center, Lewiston

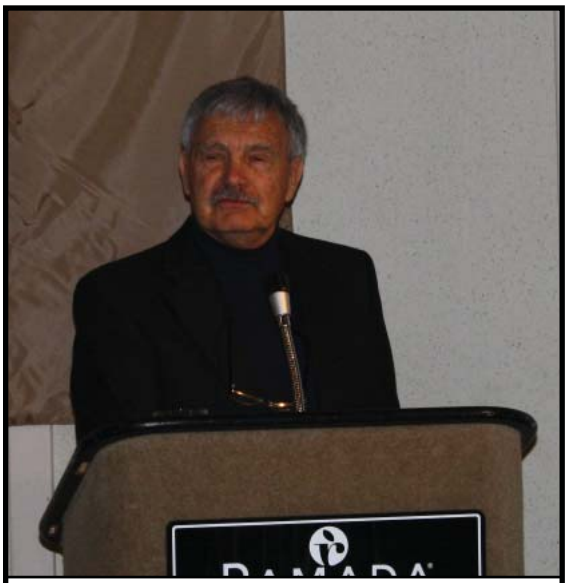
The 2013 MASE Annual Meeting and Technical Seminar will take place on Tuesday, March 5 at the Ramada Conference Center in Lewiston. For MASE members, this traditional day to gather together with the site evaluation "family", enjoy a meal, check out the latest toys, discuss politics, and trade stories rivals Christmas as one of the best days of the year. The meeting agenda, registration forms, and directions can be found inside this newsletter or from the MASE website http://www.mainese.com/.

MASE once again is offering a variety of scintillating topics of interest to our members, including concurrent breakout sessions of specialized topics. This year's breakout topics include:

Practical Solutions for Challenging Sites - find out how other site evaluators have dealt with extremely limiting site conditions.

Wetlands and Waterbodies - The experts at DHS go over setbacks and other requirements for systems designed near wetlands and waterbodies. Some of the answers may surprise you.

Topics you always wanted to know regarding wells, setbacks, and well driller responsibilities - an expert from the well drilling industry will answer your questions about how wells are sited and how they are sealed to reduce setbacks.



2012 Keynote Speaker Don Hoxie

Busse Treatment Technology - The Busse system is a modular secondary treatment unit utilizing membrane filtration. More information on the proprietary Busse system can be found on their brochure included within the newsletter, or at their website at http://www.busse-gt.com/.

In addition, the jam packed day will include the business meeting and election of board officers, the often emotionally charged update on Rule changes, a keynote address by Albert Frick of Frick Associates, and a special session on charting the future course of MASE.

Although it may be difficult to choose between the great topics offered at the breakout sessions, we hope that your decision to attend the annual meeting will be an easy one!

Message From MASE President Dale Knapp

Greetings,

As we move forward into 2013, I want to take a moment to reflect on last year, as well as spend a bit of time looking forward to what MASE will be doing.

First, I would like to take the opportunity to commend Glen Angell for stepping into the position of State Site Evaluator. He has been working with MASE closely and collaboratively, as has Dave Braley. This to me is a very appropriate and welcome partnership.

Last fall, we again teamed up with Maine Rural Water Association for the Maine Septic Conference. Representatives from Presby demonstrated their new Spec-Check unit, which I found interesting (also thanks for the pen). Tim Wade reported on an experimental system in Belgrade and resulting changes in water quality. Thanks to Glen Angell, Dave Rocque, Richard Green, Dave Studer, Jim Logan, Brent Lawson, and Bill O'Connor for helping make this conference and training a reality. Thanks also to those who attended.

Last year's site evaluator exam/MASE field day utilized the same site as the Urban Soils Workshop. The site is certainly an interesting one, and those pits on the north side just into the woods certainly led to some lively discussion at field day.

We have been actively working with the department on updates to the Rules. I appreciate all those members who have stepped forward to offer their comments and suggestions. The MASE board wants to hear from you and so does the department. I encourage you all to attend our regular board meetings in Augusta. Everyone is welcome to bring their suggestions, critiques, or simply watch the board in "action." I feel like as a volunteer board, we found more ways to make this feel like a job in 2012, might be why we have such a hard time finding volunteers to serve on the board (hint, hint, nudge, nudge).

This brings me to our outlook for 2013, and what a year it will be!!! We are putting on what I believe is a solid program again this year, offering a mix of presentations and workshops that enhance learning opportunities for everyone. Again, many thanks to Bill, Steve, Amy, Richard, Gary, Earle, and Jim for you continued dedication. You have all served this organization in an exemplary fashion. I challenge other members to thank them for their service…I don't think they believe me anymore.

Another exciting addition to 2013 is a technical demonstration of new proprietary technology to be held on July 24 behind the Augusta airport. Bringing in vendors to provide not only a Power Point presentation of their technology, but also a field installation, will be of great benefit and interest to our membership. We already have committed presenters, and the Agenda and Registration form will be out soon. This falls in line with a mission we have taken on as MASE to provide you, the membership, with beneficial educational opportunities that provide CEU's to help you maintain your license at a reasonable cost. We are looking to make this an increasing component of the MASE mission. We will play a very active role in the field exam and will be putting together a field day in the fall.

In closing, I want to thank you all for letting me serve in a leadership role. I take great pride in the organization and want 2013 to be a year we all remember fondly. I also want to thank the members of the board for their patience with me as we work together to build the MASE of the future based on an already strong foundation. I'm hoping the phone rings a little more often for you all this year. Please contact me anytime with your thoughts or feedback.

MAINE ASSOCIATION OF SITE EVALUATORS

ANNUAL TREASURER'S REPORT
2012

Cash on Hand as of 12/31/11	$ 5786.80
Fidelity Mutual Funds as of 12/31/11	$ 10,379.74
Total Assets as of 12/31/11	**$ 16,166.54**
Income	
Annual Meeting Registration	$ 2655.00
Annual Meeting Vendor Fees	$ 2825.00
Annual Dues	$ 3735.00
Eljen/Construction Consultants Donation for training	$ 3000.00
Golf Tournament	$ 664.64
MAPSS/MASE Workshop	$ 950.00
Fall Field Day	$ 1150.00
T-shirts	$ 6.00
Hats	$ 60.00
Expenses	
Annual Meeting	$ 5930.00
Gift	$ 49.00
Envirothon Donation	$ 1,000.00
Engineers Without Borders Donation	$ 1,000.00
Soil Judging	$ 0.00
Golf Tournament	$ 799.64
MWRA Training (proctors, supplies, backhoe)	$ 2757.00
Fall Field Day	$ 1606.88
Insurance	$ 605.00
Corporation Filing	$ 35.00
Website	$ 800.00
Miscellaneous (copies, postage)	$ 35.22
Bank Fees	$ 2.00
Period of 01/01/11-12/31/11 Total Income:	$ 15,045.64
-Total Expenses:	$ 14,619.74
	$ +425.90
Cash on Hand as of 12/31/12	**$ 6,212.70**
Fidelity Mutual Fund Balance as of 12/31/12	$ 11,742.72
(+ $1362.98 from 12/31/11)	
Total Assets as of 12/31/12	**$ 17,955.42**

2012 Synopsis of Income and Expenses

by Amy Jone, MASE Treasurer

I thought I'd do something a bit different this year and write a little synopsis of how MASE earned and spent money in 2012 instead of just putting in the annual list of income and expenses.

The year always begins with the Annual Meeting, so I shall begin there as well. MASE brought in $5480 in meeting and vendor fees. This is down from 2011 by $360. Total meeting attendance was less in 2012, however we did have more vendors than we usually do. Total expenses for the annual meeting were $5697 (primarily the venue/food cost, with a little toward speakers and printing).

Annual dues for 2012 provided income to MASE of $3735. Membership was down a fair bit from 2011 (we had $4715 in 2011—a $980 difference.

MASE had a strong and positive year in 2012 planning and providing two successful workshops—the Septic Conference Summer Workshop with Maine Rural Water Association (MRWA) and the Site Evaluator Field Exam/Fall Field Day. The Septic Conference with MWRA cost us $2757 with money being spent primarily on a backhoe and a small stipend to the proctors who spent a great deal of time planning and working on site. We were able to provide this workshop with a generous donation of $3000 from Eljen/Construction Consultants (the remaining money went toward the field day training).

The annual Fall Field Day which MASE plans in conjunction with the State Site Evaluator Field Exam, brought in $1150. Though with expenses of $1606.88 for a backhoe, grade stakes and other supplies, and pizza and drinks, we spent a bit more than we made even with the small amount left over from Eljen.

MASE also participated in and supported a workshop planned primarily by the Maine Association of Professional Soil Scientists-- a workshop so successful this year, that MASE earned $950.

The Annual Golf Tournament was the other event of the year. We spent $799.64 and made $664.64 for a net loss of $135.00. Thanks to Infiltrator for reimbursing MASE the cost of lunch (a $214.64 savings)

Other income for the year included the selling of all remaining hats and one T-shirt for $66. Other expenses for 2012 included insurance, corporation filing, website software update and maintenance/hosting, bank fees and a gift. We also spent money on donations to the Envirothon and Engineers Without Borders ($1000 each). It's important to note that the membership authorized a $2000 donation last year to the Soil Judging Team. A check was issued, however, never cashed, so this will not show up as an expense for 2012. I am not really sure what happened with the Soil Judging Team, but I do know a trip was never made, so the money not spent.

Our Fidelity mutual fund had an increase this year $1362.98. Not bad considering the economy is still pretty shaky.

In closing, MASE came out with a net income of $425.90. It's always nice to come out in the black, but do note that we had an unexpected income from the MAPSS workshop and a donation that was never used. As always we have things to consider when we planning for the upcoming year on how we would like to spend our money, as a group.

MAINE ASSOCIATION OF SITE EVALUATORS

2013 Membership Form & Annual Meeting

MASE NEEDS YOU!

Your membership is important and our budget depends on your dues! All MASE memberships expire in February. You can join now and be assured of another year of representation of your interests by MASE. We are working to keep license fees down, regulations reasonable, host quality field seminars, an interesting annual meeting & informative newsletters.

(Please complete a separate form for each individual)

☐ **Regular Membership** $25
(Maine Licensed Site Evaluator)

or

☐ **Associate Membership** $15
(Unlicensed individuals with an interest in the goals and purpose of the Association)

☐ **Annual Meeting – Tuesday, March 5, 2013** Member: $25**
(includes lunch) Non-member: $30**

** Please Register by March 1st to reserve a meal. No refunds are available after March 1st.*
***Registration at the door will be $30 for Members/$35 for Non-members.*

Make Checks Payable to: ***MASE***

Total Enclosed: _____

Mail To: Amy Jones, Treasurer
3330 Bennoch Road
Alton, ME 04468 jonesamyn@yahoo.com / dale.knapp@stantec.com

Name: _____ License Number: _____

Company: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone:_____ E-mail: _____

www.mainese.com **info@mainese.com**

MASE Annual Business Meeting

March 5, 2013

Ramada Inn

490 Pleasant Street, Lewiston, ME

7:45 – 8:30	Registration, vendor and display set up, coffee
8:30 – 8:45	Opening remarks – Dale Knapp
8:45 – 9:30	Rules update/Regulatory Changes – Dave Braley and Dale Knapp
9:30 – 10:45	Concurrent sessions *"Practical Solutions for Challenging Sites"* - Steve Marcotte, Dave Studer, and Jim Logan *"Wetlands and Waterbodies"* – Glenn Angell and Dave Braley
10:45 – 11:00	Break / vendor displays
11:00 – 12:15	Business meeting and election of officers
12:15 – 1:30	Lunch with the keynote speaker Albert Frick *"A Deeper Look at Engineers Without Borders"*
1:30 – 2:45	Concurrent sessions *"Topics you always wanted to know about regarding wells, setbacks, and well driller's responsibilities."* - Industry Expert and Dave Braley *"Presentation on Busse System Technology"* - Ingo Schaefer
2:45 – 3:00	Break / vendor displays
3:00 – 3:45	*"Charting our Course: Open Forum on What's Next for MASE"* – Bill O'Connor, Dale Knapp, and Jim Logan

Well Setback Cheat Sheet

by Earle Rafuse

This is a "cheat-sheet" I made up regarding drilled wells setbacks. Most of us alredy know these but it's always nice to show the "doubting Thomas" customer when trying to site a well/septic - 'Ra

Definition of Public Water Supply Well:
A public water supply is one which serves 25 or more people for at least 60 days per year or which has at least 15 service connections. Examples of Public Water Supply Wells: Water Districts, Mobile Home Parks, campgrounds, restaurants, apartment buildings and hotels.

Table 7B First Time System Setbacks
Public Water System Wells

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
300 feet	300 feet	300 feet		150 feet	150 feet	150 feet

Non-Public Water System Wells

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
100 feet(a)	200 feet	300 feet		50 feet	100 feet	100 feet

[a] Potable water supply setbacks may be reduced as prescribed in Section 7A(2).

Water Supply Lines

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
10 feet	20 feet	25 feet		10 feet	10 feet	10 feet

Table 8A Replacement System Setbacks, Limit of LPI Authority
Public Water System Wells

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
300 feet	300 feet	300 feet		150 feet	150 feet	150 feet

Non-Public Water System Wells

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
100' down to 60'	200' down to 100'	300' down to 150'		50' down to 25'(b)	100' down to 50'	100' down to 50'

[b] The current Rules appear to contain a typo in Table 8A.

Water Supply Lines

Disposal Fields (Total design flow)				Treatment Tanks (Total design flow)		
<1000 gpd	1000-2000 gpd	>2000 gpd		<1000 gpd	1000-2000 gpd	>2000 gpd
10 feet	20 feet	25 feet		10 feet	10 feet	10 feet

Section 7A2 - Well Setback Reductions

Reductions in Setback Distances between a First-Time Disposal System and a Private Potable Water Supply: If a site evaluator determines that it is impractical to install a first-time disposal system which is designed to handle <1,000 gpd at least 100 feet from a potable water supply, the LPI may authorize the setback reductions set forth in Table 7A, provided that reductions are minimized.

Table 7A

Reduction in setbacks between a Private Potable Water Supply and a disposal field with a design flow of less than 1,000 gpd

Depth of well casing or liner seal below ground level	Reduction in the minimum 100 ft setback distance
>40 feet to 55 feet	100 down to 90 feet
>55 feet to 70 feet	100 down to 80 feet
>70 feet to 86 feet	100 down to 70 feet
>86 feet	100 down to 60 feet

Well Drilling Rules

The well driller may determine that it is not practical to maintain the minimum setback distances from disposal fields as specified in Table 7B for those systems of <1,000 gpd. In these instances the minimum setback distance may be reduced as provided in Table 7A for the following reasons:

- The size of the property is not sufficient to allow for the required setback; or
- Sufficient setbacks from other potential sources of contamination cannot be met; or
- Excessive slopes prohibit access; or
- The location of permanent structures would result in unreasonable impacts or damage to the structures; or
- The location of lakes, ponds, streams or wetlands prohibits meeting the required setback; or
- The presence of bedrock at or within three vertical feet of the surface would result in unreasonable trenching requirements.

In these cases a bedrock well must be installed and setback reductions as set forth in Table 7A shall be used. In addition, a Setback Reduction Notification Form must be completed. All other reasons for reducing the setback from a bedrock well to a disposal field(s) shall require a Specialty Well application approved by the Commission prior to drilling.

Note: There is no setback reduction allowed for gravel wells without a Specialty Well application approved by the Commission.

<u>Special Setback for Hydro-Poles:</u>

Treated pole	50 feet, well to pole
Untreated pole	25 feet, well to pole

22st Annual MASE Golf Tournament Results

By Dave Kamila

MASE held the 22ND Annual Golf Tournament on June 15th at the Meadows Golf Course in Litchfield. We had a gorgeous day and 17 players showed up, which was a improvement over the 13 players we had last year. I trust it is a sign that the sluggish economy is slowly coming out of hibernation. Ron Bernard and his crew had the course in terrific shape as always. Everyone enjoyed a great round of golf and a fantastic lunch compliments of Kyle Landis with Infiltrator Systems. Unfortunately my co-conspirator Bruce Johnson couldn't make it this year due to his recent hip replacement. Hopefully he'll be back on track for next season.

The winning team consisting of; Dick Watson, Tim Hodgkins and yours truly came in at +1. We had tie for second place with Mark Hampton, Rod Kelshaw and Gary Fullerton along with Andy Pierce, Dick Babine, Paul Beers and Dick Sweet shooting +7.

Closest to the pin winners were: #3- Mark Hampton 11'-0" , and Tim Hodgkins 28'-6"; #7- Dave Kamila 11'-5" and Andy Pierce 60'-0"; #15- Mark Hampton 13'-0" and Clough Toppan 17"-8"; #17- Clough Toppan 13'-9" and Dave Moyse 23'-7".

This year's Longest Drive honors went to Clough Toppan and Bonnie Cobb.

I look forward to an ever improving economy and seeing many more of you come next year. This year's tournament is tentatively scheduled for summer solstice on June 21st, so mark your calendars and groove your swing for another great day on the links.

Well, if you can't move the ball closer to the hole, can you move the HOLE closer to the ball?

It's All Legal

by Richard Green

When it is time to put out a new MASE newsletter, I resort to hounding the board, among others, to send me articles of interest to the membership. Last year Bill Noble sent me this cartoon by Bill Mauldin which had a reference to soil. I had never heard of Bill Mauldin, but he was an infantryman in Europe during World War ll and drew a regular comic strip which often featured two cartoon infantrymen, Willie (who was modeled after his comrade and friend Irving Richtel) and Joe, who became synonymous with the average American GI. Apparently his work was well-known and popular.

"Me future is settled, Willie. I'm gonna be a perfessor on types o' European soil."

"Willie and Joe" ©Bill Mauldin (1944). Courtesy of Bill Mauldin Estate LLC.

We decided that it would be a good idea to get permission from Mr. Mauldin to use the cartoon. It turned out that he passed away in 2003, Bill tracked down his estate in care of a law firm in Los Angeles and wrote them asking for permission to use the cartoon. The reply came back that they would be happy to grant permission for a fee of $150. Bill Noble wrote them back, saying thanks but no thanks. The estate then notified him that they had decided we could use the cartoon at no cost as long as we signed some legal documents and followed a a list of rules found within. Two months later we finally had permission, and the cartoon is included here.

Thanks to Bill for his diligence in seeing this through. The legal costs that the estate paid to give us permission are unknown. Needless to say we will probably not try to get legal permission for newsletter graphics again. In fact, the cartoon on the previous page was used withont permission.

Why is the newsletter so late?

by Richard Green

The MASE Board tries to send out a newsletter before the annual meeting each year, so technically we have met the deadline, but barely. As editor, I have to take the blame for that.

I am fully capable of making excuses when necessary, but rarely do I get to put it in writing.

Actually, I don't need to write too much of an explanation. Instead I am going to include a picture of what was left of my car at the end of February 15, the deadline for sending articles for the newsletter.

This was the result of a head-on collision with a much larger pickup truck. Miraculously, we both walked away with minor injuries. However, work on the newsletter was delayed for a couple of weeks while I was recuperating.

Thanks for understanding and I will see you at the annual meeting tomorrow!

Small scale sewage treatment system with membrane bioreactor technology

BUSSE GT

water for the next generation

Note from MASE:

The 2013 annual meeting will include a presentation of the BUSSE GT treatment system. A portion of their brochure is included here for information. This is not an endorsement of the product by MASE.

Waste water treatment and recycling for decentralized areas

The modular design makes our system suitable for larger developments such us hotels, camp grounds or office buildings with up to 500 inhabitants.

Plant type GT 220, installed in a cellar

BUSSE GT turns domestic waste water into *reusable water*

The BUSSE GT Domestic Sewage Treatment System uses Membrane Bioreactor (MBR) Technology, currently the most advanced method of waste water treatment and is the first system with this type of technology in the US that has been certified by NSF International.

Fig. 1:
Complete solution for single and shared occupancy houses with a cellar

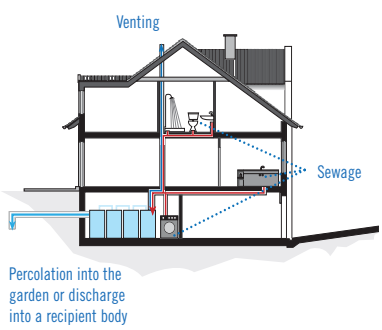
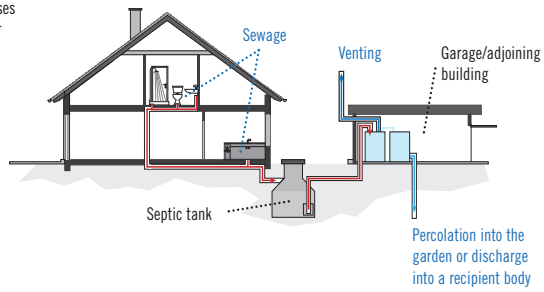


Fig. 2:
Complete solution for single and shared occupancy houses without a cellar



MBR Technology even eliminates bacteria and germs. It restores waste water to a hygienic condition fit for use as re-use water, for example, watering the garden or flushing toilets. In this way the consumption of drinking water in a household can be reduced by at least one third.

The BUSSE GT system ensures that the discharged water is cleaner than the law requires. Thus, water treated by the BUSSE GT system may be discharged in sensitive areas and water protection zones.

Since MBR technology consist of biological treatment and Membrane filtration in one process no additional treatment processes such as sand filters or other clarifiers are needed.

Other advantages of this new compact product are the small foot print and the fact that it can be installed without expensive earthmoving work.

The BUSSE GT system which consists of safety tanks can be installed in a few hours and is immediately ready for operation.

water for the next generation

MASE at a Crossroads: Picking a Path for the Future

by Bill O'Connor, LSE 363
Vice-President, Maine Association of Site Evaluators

I guess I'm no longer too cool to admit it, I'm a "joiner". I'm just that type of person. I am someone who genuinely enjoys being "part of something". Whether it's a Youth Soccer program, the PTA at my children's school or an informal hiking club, I want in. That being said, it should be evident that when I first became licensed as a Site Evaluator, I couldn't wait to become an active part of MASE. Lucky for me, within a couple of years of being licensed, there was an opening for a director on the MASE Executive Board. I jumped at the chance to participate and hopefully to contribute. That was several years ago, and I have been happy to serve MASE in several different capacities since.

As a member of the Board, I was quick to realize that there is almost always something that needs to be done. Whether it is planning and executing the major MASE events of the calendar year, coordinating additional training for our membership or interfacing with the Division of Environmental Health regarding existing and proposed versions of the Subsurface Wastewater Disposal Rules, the members of the Executive Board don't often need to go looking for topics for discussion or for courses of action to plan at our meetings. Our yearly agenda is both full and regimented, and in general, not a lot of brainpower needs to be expended in terms of what-are-we-going-to-do-next style inquiries.

It has been pointed out to me by a few long-time members of MASE that maybe this is a problem.

MASE has lost its way, they say. The Board is not focusing on the issues that are of utmost concern to the Membership. MASE is spending its time, energy and funds in the wrong places.

These comments have caused me to reevaluate how we on the Board have been expending our energies. The Board works hard to assure that the MASE-sponsored events each year are well-organized and include content that is relevant to the professionals in our industry. Admittedly, the direction in which we have been drifting over the past 3 or 4 years has been very heavy on training, and maybe has been less focused on tilting with DEH over the Rules. The generous annual donations from the Eljen In-Drain folks (with the stipulation that the money be spent on education and training) made it easy for us to focus more on training than on other issues than in years past.

In an attempt to spend the Eljen money in a meaningful way, we decided to present a summer training seminar at the Maine Rural Water Association's land in Richmond. Beginning in 2010, the Board has worked for several months each year to try to create an educational and meaningful seminar. Regrettably, attendance at these seminars was nowhere near the levels that we were hoping for. The Board has since decided to discontinue MASE's relationship with the MWRA, though we haven't given up on putting together an additional training and education seminar for our membership.

So…has the Board lost its way? Are we spending our time, energy and MASE's money in the wrong places? I need YOU to tell me. I promise, I won't take it personally.

At our annual meeting on March 5 at the Ramada in Lewiston, the last part of the day's program is to include a discussion in which I'm hoping everyone will take part. We want to hear from you, the MASE membership, about how you would like the Executive Board to proceed going forward. We want to know where you think our efforts will be best put to use. The men and women who comprise the MASE Executive Board are capable, energetic, committed, and most of all, are people who care about the profession of Site Evaluation. We are here to serve our constituents. We are more than happy to work on your behalf, we just need to know what you want us to do. I hope you will all stick around until the end of our upcoming meeting and let us know where you want MASE to go in 2013 and beyond.

Note from MASE:

The 2013 annual meeting will include an update of this project, which has utilized MASE donations.

January 30, 2013

MASE
President Dale Knapp
Stantec Consulting
30 Park Drive, Topsham, ME 04086

Dear Mr. Knapp:

The University of Maine's student chapter of Engineers Without Borders is excited to inform the Maine Association of Site Evaluators that we are in the final stages of our sanitation project in Dulce Vivir, Honduras! As you may recall as highly involved supporters of our group, we worked with the community of Dulce Vivir de Copan in Honduras to design and build a wastewater system for the entire village. We are traveling again to Honduras in March 2013 to complete several remaining components of the project and work with the community on operations and maintenance.

We began this project in Dulce Vivir because high ground water, seasonal rains, and poor soil caused the latrines in the community to overflow, creating unsanitary conditions and disease. The EWB and community-designed wastewater system will improve the sanitary conditions and the standard of living in Dulce Vivir. In March 2009, three EWB-UM members and our professional mentor at the time, Kyle Coolidge from Woodard & Curran, traveled to Dulce Vivir to discuss sewage treatment options, determine the community's preferred solution, and collect data needed for the project design. The trip was a great success on all of these fronts, and we laid the groundwork for an ongoing partnership with both Dulce Vivir and the nearby city of Dulce Nombre.

Since that initial trip, our chapter has been working to complete the project. We've designed and implemented a sewer system that connects each home's pour-flush latrine to a common pair of septic tanks and a leach field. We have also been working on operations and maintenance plans for system. Our plan for the trip in March 2013 is to work on training the community on the proper management and maintenance of the system, and to develop an efficient way for us to help them as we transition into new projects.

One of the key aspects of the EWB development model is community participation. Our chapter has worked hard to design and build this project and have spent $40,000 so far in the survey, design, and construction, but we cannot finish it alone. The estimate for the upcoming trip in March 2013 is $18, 695.91. Our chapter is working hard to raise these funds needed to complete this project.

We greatly appreciate all the support you have given us in the past. This continuous support has been a major reason why this project was able to become a reality. A future contribution to our effort will help change the lives of the people of Dulce Vivir. It will also change the world right here at the University of Maine by encouraging the growth of motivated, passionate, and socially conscious young engineering and science students. It has and will provide us with an opportunity to gain hands-on experience that would otherwise be impossible to acquire, including doing soil

evaluation for septic, working on subsurface wastewater disposal design, estimating materials, writing specifications, and working alongside the Hondurans to layout and build approximately 1300 feet of sewer lines, install 5 septic tanks, and oversee the construction of the two stone beds approximately 20 by 85 and 17 by 80 feet. Although the size of this system may not be considered large for your professional members, it was a very ambitious project for a student chapter of EWB, and we were informed by the Honduran Officials (equivalent of our EPA) that it was the largest septic system they have seen to date.

We have been supported individually with time, expertise and/or money/product from your individual and associate members:

- *Albert Frick, SE* has mentored us for 4 years and has made two field trips to work hands on with the students on the design and the construction of the septic system.
- *Wayne Berzinis of Construction Consultants (Eljen)* has gifted materials to use to bring to Honduras
- *Doug Riley, SE* has provided peer review for our design
- *Darryl Brown, SE* has given us advice on references for in-country Honduran connections.
- *Bryan Jordan SE and CAD Designer for Albert Frick Associates* has helped us with CAD support.
- *Maine Technical Source* has lent us survey equipment to use
- Many other Maine Engineering and Construction Companies that may have members and/or associate members as part of their staff have made financial contributions. Among these companies are: *Woodard and Curran, Drumlin Environmental, Wright Pierce, Cianbro*.

We are very proud of this project and it was awarded First Place Honors in the Newman's Own Foundation Campus Community Service Challenge in 2012 as well as a Premier Project Award from EWB-USA.

We are looking forward to hearing from you and are hoping that you can help us once again!

Please do not hesitate to contact us with any questions.

Sincerely,

Emily Kelsey
President

Engineers Without Borders
University of Maine
5798 Student Innovation Center
Orono, ME 04469
www.umaine.edu/ewb

Setbacks That Don't Make Sense to Me

by
David L. Marceau ME Site Evaluator #246
Gartley & Dorsky Engineering & Surveying

As you all know the process of designing a septic system is getting more and more complicated. The addition of setbacks from stormwater treatment systems with the subsurface code (the code) changes in 2009 has made this task much more difficult in some circumstances.

Most of the setbacks listed in Table 7B of the subsurface code make sense and are not generally a problem. However, the design requirements for stormwater treatment systems conflict with subsurface code in several ways. First, some stormwater systems need soil conditions similar to septic systems. Secondly, they **must** be located down slope of, and, be in relative close proximity to, the impervious areas they are built to treat. Third, due to setback requirements, the placement of septic systems cannot be established without knowing where the stormwater treatment systems are located yet this cannot be completed until the entire project is designed. Fourth, is the lack of consistence in which the setbacks are applied: the stormwater rules only require setbacks to infiltration systems so engineers are not required to deal with setbacks for most types of stormwater systems. Yet LPI's and site evaluators are required to adhere to the code.

You might say "design the system and make them work around it". There are two problems with this approach. First, stormwater systems won't have any setbacks because no one is required to make sure this happens (because the septic designs are completed first). Secondly, the setbacks from septic systems to stormwater treatment systems established in the code are excessive. Think about it, the code allows a ditch that intercepts groundwater to have a 25 foot setback to a disposal field yet the code requires a 50 foot setback to an underdrained soil filter (with no connection to ground water) upslope of a septic tank. This is only one example, when the setbacks double and triple based upon flows, the problem gets much worse. Add to this the buildings, septic tanks, disposal fields and stormwater treatment systems you have in cluster developments and you have real problems. As I hope you can see, this can create an ethical dilemma for site evaluators and engineers, which should not exist.

Furthermore, because we have all of the professionals in one office able to address this problem we feel like we are being penalized. We have seen submissions by others that do not meet the setbacks in the code get approved with no problems while we spend a lot of time and money redesigning projects that comply with the code.

Another issue that has exacerbated the problem is the slow economy. The code setbacks were established in the previous version of the code in 2009. The lack of new development over this period of time, particularly cluster development, has not brought this up as a problem in the engineering or site evaluation communities.

These kinds of conflicts don't do any of us any good. We need setbacks for stormwater systems that are agreed upon by all regulatory agencies, but not the ones currently in place. In my opinion, the setbacks for stormwater treatment systems to septic systems should be no greater then the setbacks that have been established for ditches. Then double and triple them as flows increase. If we are to go forward with any kind of meaningful progress with cluster development this issue must be resolved. I hope to hear from you.

SOILS AND NATURAL RESOURCE WORKSHOP

By David Rocque
State Soil Scientist

The Maine Association of Professional Soil Scientists in conjunction with the Maine Association of Wetland Scientists, Maine Association of Site Evaluators and Soil Science Society of Northern New England is once again sponsoring a late summer workshop focusing on soils and natural resources. This year, the workshop will be held on Wednesday, September 4, 2013 at Mt. Blue State Park in the western Maine town of Weld, from 9:00 am until 3:30 pm. As in the past, this workshop will combine soil evaluation with natural resource identification and regulation issues. Natural resource/soil sites to be included in the workshop are: a potential wetland in glacial till soils on a 20% slope; sandy spodosol soils (soils with a gray leached Albic horizon directly underlain by a red to black horizon of accumulation); glacial till spodosol soils; pit and mound topography soils pits on a long sloping glacial till site that are influenced by oxygenated groundwater; a stream/wetland complex and a stream/wetland/vernal pool complex in the shoreland zone of Webb Lake that will have all kinds of shoreland and LUPC zoning issues as well as a few involving NRPA.

For those of you not familiar with Mt. Blue State Park, it is the largest State Park in Maine with a size of 8,000 acres. The park is split into two sections; the largest section surrounds Mt. Blue with the smaller section having frontage on Webb Lake. It is about an 8 mile or 11 mile drive to go from one section to the other, depending on which way you go around Webb Lake. The scenic vistas of the mountains and Webb Lake are outstanding, including from the Park Headquarters on Center Hill Road where registration and the group discussion will take place. For lunch, you can stop by the beach on Webb Lake to use picnic tables located on a lawn which extends to a sand beach or travel to the Center Hill picnic area which has spectacular views of the mountains. Lunch is not provided so bring your own. There are limited opportunities to buy lunch in the town of Weld so I suggest packing your own or buying it on the way to the park.

As in the past, we will have a team of expert soil professionals evaluating and describing soils pits including Greg Granger, Dave Wilkinson and Tony Jenkins from the NRCS; State Site Evaluator Glenn Angell; consultant Jim Logan; MASE President Dale Knapp and myself. We will also have Mike Mullen and Colin Clark (newly hired State Shoreline Zoning Coordinator) from the DEP; Marcia Spencer-Famous and Karen Bolstridge from LUPC (formerly LURC); Glenn Angel from the State Septic System Program and Jay Clement from the Army Corps of Engineers to address regulatory issues. MAWS will provide a couple of botanists to evaluate the sites wetland status and be present during the day of the workshop. The hand dug soil pits were located and excavated last summer and are being monitored for depth to seasonal groundwater table by Mt. Blue Park staff so there should be some data to compare with seasonal groundwater table determinations made on the basis of soil morphology. Along with soil profile descriptions, the soils team will provide soil drainage class determinations, hydric soil determinations (both New England Field Indicators and National Indicators) and subsurface wastewater disposal rules classification using the new drainage key (here is your chance to use the new key with assistance from experts). Regulators will provide regulatory interpretations for protected natural resources including freshwater wetlands, streams and vernal pools. There will also be a discussion of shoreland zoning issues for a site near Webb Lake.

Registration will be at the Park Headquarters on Center Hill Road, 1.4 miles from the intersection of Center Hill Road, Rt. 156 and Rt. 142, from 8:30 am to 9:00 am. Participants will be given a map showing the locations of the 5 sites they are to visit. Please bring with you a Munsell color book and copies of any keys you wish to use at the sites (NE Hydric Soil Field Indicators, National Hydric Soil Field Indicators, SSWWD Rules Drainage Key, MAPSS Drainage Key, Wetland Plant List etc.). You will have until 12:30 pm to visit the sites (4 of the sites are located near each other on the access road to the beach on Webb Lake and the other site is less than a mile from

Continued from previous page

the Park Headquarters on the Mt. Blue parcel). Each of the sites will have at least one monitor to show you the points of interest and answer general questions. They will also have copies of the soil pit evaluations and other determinations which they will share with you after you have made your own determinations.

At the conclusion of the field portion of the workshop, participants will gather at the park headquarters scenic overlook at 1:30 pm for a discussion of each site. MAPSS, MASE and MAWS presidents will lead the discussion of each site with participation from soil pit evaluators, other experts and regulators and I will do my best to keep things lively (as usual).

In keeping with tradition, I have chosen some challenging sites and soils. These are conditions you all see in the field and struggle with. Not all site evaluations are straight forward or black and white. The purpose of this workshop is to bring consultants and regulators together to discuss difficult sites and attempt to come to a consensus on how to classify them. This will be a good opportunity to use the MASE Drainage Key on some difficult soils, with assistance from experts including the State Site Evaluator, and see what is a tributary stream in the shoreland zone (requiring a 75 foot setback).

This workshop should have broad appeal to soil scientists, wetland scientists, site evaluators, code enforcement officers, planners, municipal officials, regulators, lake association members, foresters and the general public. You can participate at whatever level is appropriate for your background and knowledge level (the experts stationed at each site will provide the level of assistance you require).

It should be a fun, interesting and informative day of camaraderie for all in a very scenic location.

MASE Annual Meeting 2012

The MASE Annual Meeting and Technical Seminar was held at the Ramada Conference Center in Lewiston for the second year. This year we introduced concurrent breakout sessions in different rooms, allowing attendees to choose their preferred topic. Breakout topics were Pumps & Tanks; Site Evaluator Ethics; Advanced Treatment; and Composting Toilets. The key note speaker was Don Hoxie, former of the Division of Health Engineering. Members elected a new slate of board officers, approved donations to UMO Soil Judging Team, Engineers Without Borders, and the Envirothon, and accepted a donation for Maine Construction Consultants for training and education. The attendence was 155 including vendors.

2013 Annual Meeting Program Agenda

Maple Hill Farm Inn and Conference Center
March 12, 2013

8:00- 8:30 Registration (coffee and pastries provided)

8:30-10:00 **BUSINESS MEETING**

- President's Introduction – *Johanna Szillery* (5 minutes)
- Treasurer's Report – *Gary Fullerton* (10 minutes)
- Secretary's Report – *Dave Turcotte* (10 minutes)
- MDEP Task Force Update – *Michael Banaitis* (10 minutes)
- Envirothon Update and Donation – *David Rocque* (10 minutes)
- University of Maine Soil Judging Team Update - *Ken Stratton* (5 minutes)
- Education Committee – (10 minutes)
- UMaine Update – *Ivan Fernandez* (10 minutes)
- USM Update – *Samantha Langley-Turnbaugh* (10 minutes)
- NRCS Updates – T*ony Jenkins* (10 minutes)

10:00-10:15 **ELECTION OF OFFICERS** - Nominating Committee (*Anna Donahue)*

10:15-10:30 **Break**

10:30-11:30 **NEW BUSINESS**

- USDA-NRCS Ecological Site Description – *Sally Butler* (20 minutes)
- Technical Committee Update and Proposed Changes – *Christopher Dorion* (20 minutes)
- 2013 Workshop – Mount Blue Soils and Natural Resource workshop – *David Rocque (15 min.)*
- Education Committee and Outreach Efforts, Soils of Maine Brochure – *Johanna Szillery and David Turcotte* (15 minutes)

11:45-12:30 Buffet lunch

12:30-1:15 **The Northeast Temperate Network**
Kathryn Miller, Plant Ecologist, Acadia National Park

1:15-2:15 **New England and National Hydric Soil Indicators**
Tom Peragallo, Senior Soil and Wetland Scientist, LEC Environmental Consultants, Inc.

2:15-2:40 **BREAK**

2:40-3:40 **Human Transported Material Soils of Anthropogenically Altered Estuarine Shorelines**
Sean Donohue, Project Manager – Environmental Scientist, VHB, Inc.
Morphology, Properties and Classification of Human Transported Material (HTM) Soils
Tony Jenkins, State Soil Scientist, USDA – NRCS

*Maine Licensed Site Evaluators will be awarded 6 professional development hours for full day attendance

Maine Association of Professional Soil Scientists
2013 Annual Meeting Registration
Maple Hill Farm Inn & Conference Center, Hallowell
Tuesday, March 12, 2013

Name _____

Company or Affiliation_____

Address:_____

Work Phone:_____ Cell Phone:_____

Fax:_____ E-mail:_____

Are you a Maine Certified Soil Scientist? _____ If yes, License #: _____

Are you a USDA-NRCS Soil Scientist? _____ If yes, How many years in Maine? _____

Are you SSSA Certified? _____ APSS _____ CPSS _____ Certification #:_____

Membership Dues: _____

*Full Member - **$25** Associate Member - **$15** Students who attend annual meeting - **Free**

*Full members must be Certified Soil Scientists in Maine, NRCS Soil Scientists working in Maine for at least 3 years, or have taught collegiate courses in soil science in Maine and been an associate member for at least 3 years.

Registration Fee: _____ Note: Registration deadline is Friday, March 1st, 2013

Full and Associate Members - **$40** Students - **$15** Non-members - **$50**
(add $10 if registered at the door; lunch will not be guaranteed)

Total Amount Enclosed: _____

Please submit form and check made payable to **MAPSS** and mail to:

Gary Fullerton
104 Millturn Road
Limington, ME 04049

for more information: www.mapss.org

gfullerton@sebagotechnics.com

Note: CEUs pending for Maine Licensed Site Evaluators

Maine Association of Wetland Scientists

Winter Conference & Annual Meeting
Monday, March 25, 2013
Maple Hill Farm B&B, 11 Inn Road, Hallowell, ME

The Maine Association of Wetland Scientists will be holding its annual meeting at Maple Hill Farm in Hallowell. For directions go to http://www.maplebb.com/ **PLEASE NOTE CHANGE IN FEE STRUCTURE:** Payment received by March 11, 2013 (2 weeks prior): Registration for MAWS members is $45 (not including annual dues); for non-members $50, and for students $20. **:** Payment received AFTER March 11, 2013, including payment at the door, add $10 (no change for students). Members, please take this opportunity to continue your support of MAWS by paying your annual dues. **Please complete the attached registration form and return to MAWS by March 11th.**

WATER RESOURCES AND WATER QUALITY
DRAFT AGENDA (some details may change)

8:00 – 8:30	***Registration***
8:30 – 8:40	***Welcome, Introduction of Speakers***
8:40 – 9:20	***Maine's Stream Habitat Viewer,*** Slade Moore, Project Coordinator, Maine Coastal Program / Gulf of Maine Council on the Marine Environment and Alex Abbott, Database and GIS Manager, USFWS
9:20 – 9:50	***Maine's In-Lieu Fee Compensation Program: Overview & Lessons Learned,*** Alex Mas, Director of Strategic Initiatives, The Nature Conservancy in Maine
9:50 – 10:10	***The Biogeography of Tidal Marsh Birds in the Northeastern United States***, Maureen Correll, University of Maine – Orono, MAWS 2012 Stipend Winner
10:10 – 10:30	***Break***
10:30 – 11:15	***Of Boulder Fields, Vernal Pools, Functional Assessment, and the Corps***, Paul Minkin, Senior Wetland Scientist with the USACE New England District Regulatory Division
11:15 – 11:45	***[Title TBD on Capisic Brook Stormwater Management]***, Doug Roncarati, Stormwater Program Coordinator, Portland Water District
11:45 – 12:15	***Understanding and Restoring Maine's Urban Streams: Trout Brook Case Study***, Wendy Garland, Environmental Specialist, Watershed Management Unit, Maine DEP
12:30 – 1:30	***Lunch***
	KEYNOTE SPEAKER: [Title TBD on Aquatic Connectivity], Scott Jackson, Wildlife Biologist, University of Massachusetts – Amherst
1:30 – 2:30	***Dam those Maine Rivers! -- Hydrology and restoration of Maine's large rivers,*** Stephen Shepard, Maine Hydro Licensing Coordinator, USFWS
2:30 – 3:00	***Farewell to the PUB – Regulated Resource Response to Dam Removal,*** Michael Chelminski, P.E., Stantec
3:00 – 3:30	***A Wetland Scientist Goes to Augusta: legislative update from Jim Boyle - State Senator from District 6 and Chairman of the Joint Standing Committee on Environment and Natural Resources,*** Jim Boyle, Maine State Senator, District 6
3:30 – 3:45	***Break***
3:45 – 5:15	***Annual business meeting***

We will provide certificates of attendance for attendees at the conference and business meeting.
If you have any questions, contact MAWS Program Chair, Sarah Watts @ (207) 879-9496,
or by email sarah.watts@tetratech.com.

MASE Newsletter

February 2012

MAINE ASSOCIATION OF SITE EVALUATORS

Newsletter Editor Richard Green

Contributors

Amy Jones
Dave Kamila
Dale Knapp
Bill Noble
David Rocque
Bill O'Connor

Send articles, photos, news, and other publication items to:
Richard Green, richard.a.green@roadrunner.com
(207)685-8141 ***MASE website: www.mainese.com***

2012 MASE Board Officers

Dale Knapp .....President
William O'Connor ..... Vice President
Amy Jones..... Treasurer
Richard Green ..... Secretary
Gary Fullerton.....Ex Officio
James Logan..... Director
Steve Marcotte ..... Director
Dave Silver..... Director

MASE Calendar

Meetings, trainings, and other events of interest to MASE Members

March 5, 2013	MASE Annual Meeting and Technical Seminar, Lewiston
March 12, 2013	MAPSS Annual Meeting, Hallowell
March 25, 2013	MAWS Annual Meeting and Winter Conference, Hallowell
June 21, 2013	Annual MASE Golf Tournament, Litchfield.
July 24, 2013	MASE Training Workshop & Technical Demonstration, Augusta.
Sept or Oct, 2013	Annual Field Day, Date and Site TBA

Directions to the Ramada Conference Center

490 Pleasant Street, Lewiston, Maine

From North:

Take Interstate 95 South to Exit 80. Continue straight ahead. Follow signs for Industrial Park. At traffic light, go straight. Hotel and conference center is on the left.

From South:

Take Interstate 95 North to Exit 80. At stop sign, turn left. Follow signs for Industrial Park. At traffic light, go straight. Hotel and conference center is on the left.